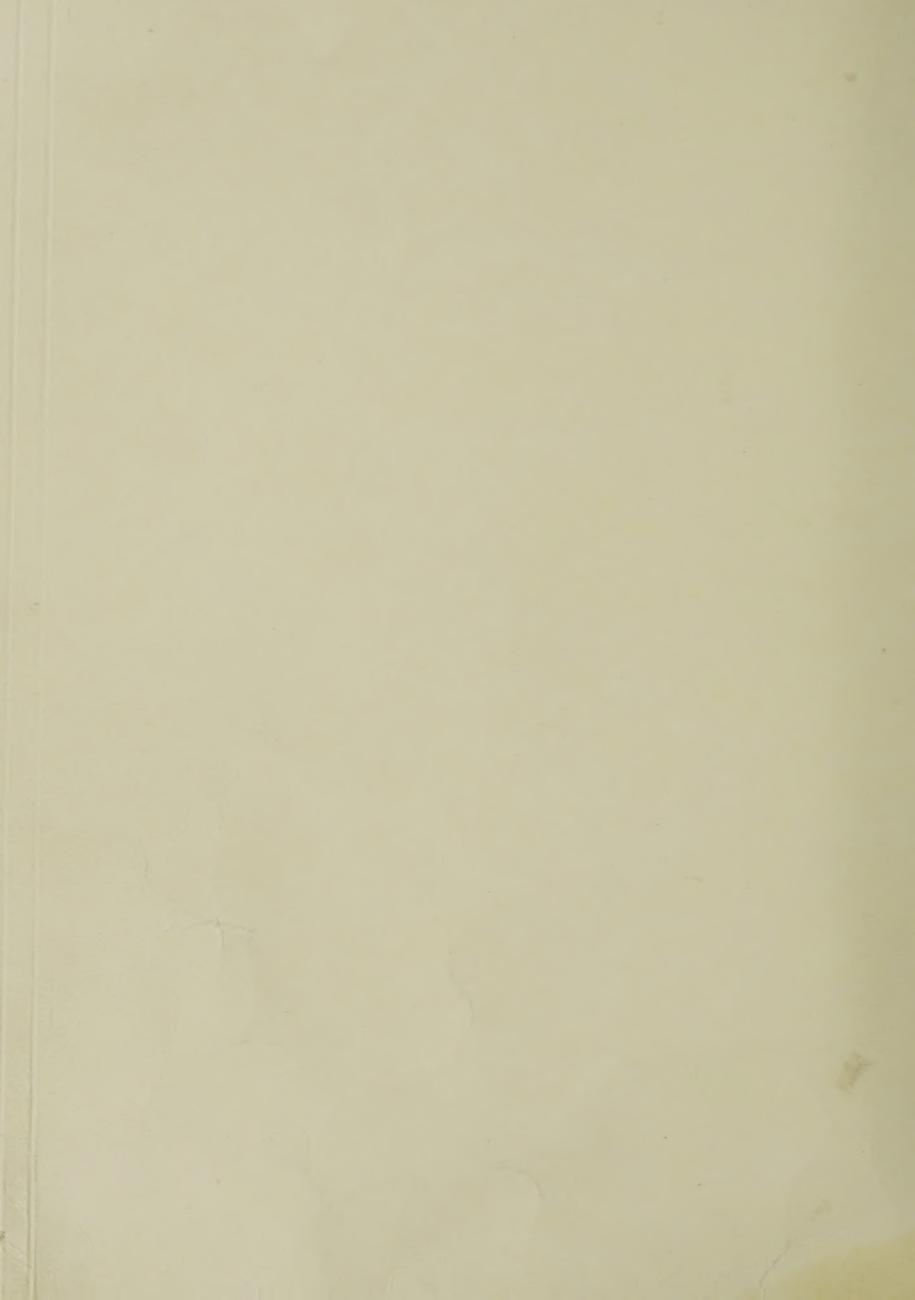
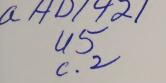
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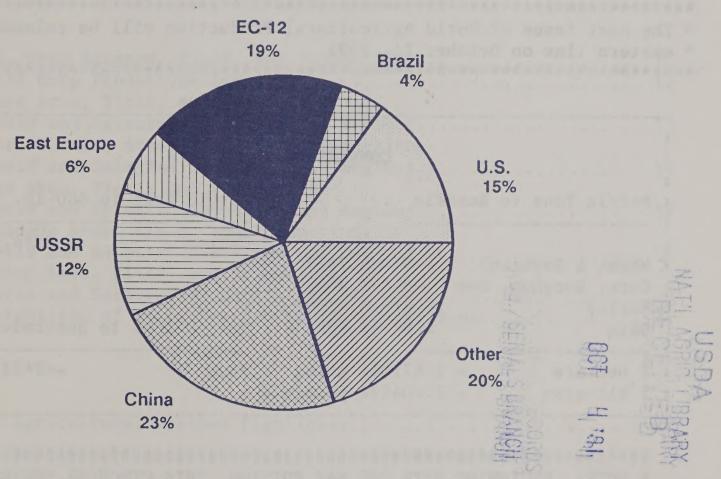
United States
Department of
Agriculture

Foreign Agricultural Service Circular Series WAP 9-91 September 1991

World Agricultural Production

World Red Meat Production 1/

1992 Forecast



1/ Includes carcass-weight-equivalent of beef, veal, pork, sheep, and goat meat.

Production Articles This Month...

World Red Meat

Asian Forestry

World Almonds

Soviet Union Grains

World Filberts

Cote d' Ivoire Grains

Eastern Europe Grains

This report draws on information from USDA's global network of agricultural attaches and counselors, official statistics of foreign governments, other foreign source materials, and results of office analysis. Estimates of U.S. acreage, yield, and production are from USDA's Agricultural Statistics Board, except where noted. Text and numbers in this report are based on unrounded data and detail may not add to totals because of rounding. This report reflects official USDA estimates released in World Agricultural Supply and Demand Estimates (WASDE-258), September 12, 1991.

This report was prepared by the Production Estimates and Crop Assessment Division (PECAD), FAS/USDA, Washington, D.C. 20250. Further information may be obtained by writing to the division or by calling (202) 382-8888 or by FAX (202) 447-7729.

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CONVERSION TABLE

Metric Tons to Bushels

Cotton

Cotton

Metric Tons to 480-lb. Bales

Metric Tons

Metric Tons

Metric Tons

Metric Tons

Metric Tons to Hundredweight

Metric Tons to Hundredweight

Metric Tons

Metri
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TABLE OF CONTENTS

September 1991

SUBJECT	PAGE
PRODUCTION HIGHLIGHTS FOR 1991/92	
<pre>Wheat Coarse Grains Rice Oilseeds Cotton</pre>	577
Table 1. U.S. Crop Acreage, Yield, and Production	
Table 3. Wheat Area, Yield, and Production: World and Selected Countries and Regions	. 13
Table 4. Coarse Grains Area, Yield, and Production: World and Selected Countries and Regions	. 14
Table 5. Rice Area, Yield, and Production: World and Selected Countries and Regions	
Table 6. Oilseeds Area, Yield, and Production: World and Selected Countries and Regions	. 18
Table 7. Cotton Area, Yield, and Production: World and Selected Countries and Regions Table 8. Reliability of September Production Projections	
MAPS	
Map 1. World Agricultural Weather Highlights	. 22
WEATHER BRIEFS	
Souther Brazil: Dryness Becoming A Concern	. 23

SUBJECT		PAGE
PRODUCTION	BRIEFS	
Indonesia: Thailand: R World: Suga Egypt: Prod South Afric Cote d' Ivo USSR: Lives	a: Land Diversion Scheme To End In October Prolonged Dryness In Java Hurts Rice Crop ice Planting Benefits From Rain r Production Revised Upward uction of Panel Products Increasing a: Forestry Situation ire: Forestry Situation tock Developments In Perspective	24 24 25 25 25
World Almon World Filbe Asian Fores Field Trip Cote d' Ivo	leat Production	 41 43 44 51 57
FEATURE TAB	BLES CONTRACTOR OF THE PROPERTY OF THE PROPERT	
Table 10.	World Red Meat Production. Red Meat Production, Selected Countries. Beef and Veal Production, Selected Countries. Pork Production, Selected Countries. Lamb, Mutton, and Goat Meat Production, Selected Countries. Cattle and Bufflo Inventories, Selected Countries. Hog Inventories, Selected Countries. Sheep Inventories, Selected Countries. World Almond Production. Filbert Production. China Forestry Production. Tndonesia Forestry Production. Korean Forestry Production. Korean Forestry Production. Malaysian Forestry Production. Malaysian Forestry Production. Malaysian Forestry Production. Myanmar Forestry Production. Myanmar Forestry Production. USSR: Total Grain Production and Procurement by Rebuplic. Cote d' Ivoire Grains: Area, Yield, and Production. East European Grain Area. East European Grain Area.	31 33 35 36 37 39 40 42 43 44 45 46 47 48 49 50 55 56 60
CHARTS	3	* (1
Chart 1.	Cote d' Ivoire: Area and Production	61

PRODUCTION HIGHLIGHTS FOR 1991/92

September 1991

WHEAT: World production for 1991/92 is estimated at 550.9 million tons, up 0.4 million, or less than than 1 percent from last month, but down 7 percent from last year. Total foreign production is estimated at 496.1 million tons, up 0.9 million or only marginally from last month, but down 4 percent from last year. Country highlights are as follows:

o United States

Production is estimated at 54.8 million tons, down 0.6 million or 1 percent from last month, and down 27 percent from last year. Spring wheat yields were reduced due to disease and excessive rainfall in Minnesota as well as lower harvest results in the Dakotas.

o Canada

Production is estimated at 32.5 million tons, up 1.5 million or 5 percent from last month, but down 1 percent from last year. A recent survey of producers taken by Statistics Canada indicated higher-than-anticipated area. Last year's production was also adjusted upward by 3 percent.

o EC-12

Production is estimated at 88.5 million tons, down 0.6 million or 1 percent from last month, but up 4 percent from last season. In Spain, dry weather in the northern areas reduced the estimated yield. French wheat yields increased slightly. In Germany, yields were also reduced.

o Australia

Production is estimated at 11.5 million tons, down 0.5 million or 4 percent from last month, and down 25 percent from last year. The decline is the result of a reduction in area and prospective yields due to drought.

o Syria

Production is estimated at 2.0 million tons, up 0.5 million tons, or 33 percent from last month, and up 16 percent from last year. Favorable weather in most growing regions improved yield prospects.

COARSE GRAINS: World production for 1991/92 is estimated at 795.1 million tons, down 3.6 million, a slight decrease from last month, and down 5 percent from last year. Total foreign production is estimated at 581.6 million tons, virtually unchanged from last month, but down 4 percent from last year. Country highlights are as follows:

o United States

Production is estimated at 213.5 million tons, down 3.6 million or 2 percent from last month and down 7 percent from last year. Corn and sorghum yields were reduced due to dryness in the Corn Belt and Plains. Corn production was reduced by 3.1 million tons while sorghum production was lowered by 0.4 million.

Canada

Production is estimated at 23.6 million tons, down 2.4 million or 9 percent from last month, and down 10 percent from last year. The changes are based on Statistics Canada data that indicated higher area, but lower yield for barley; lower area for oats; lower area and yield for rye; and higher area and yield for mixed grain.

o EC-12

Production is estimated at 87.5 million tons, down 2.0 million or 2 percent from last month, but up 4 percent from last season. In Spain, dry weather severely affected yields for barley, oats, and rye. In Germany, barley, oats, and rye were revised downward, while mixed grain and corn were changed upward. In France, barley yields were revised upward while corn area and yields were reduced.

o Other W. Europe

Production is estimated at 11.8 million tons, down 0.4 million or 3 percent from last month, and down 13 percent from a year ago. An increase in barley area and production in Finland offset decreases in oats area and production. In Sweden, a reduction in barley and oats area reduced coarse grain production.

o Indonesia

Production is estimated at 5.4 million tons, down 0.2 million or 4 percent from last month, but up 2 percent from last year. A prolonged drought in Java reduced the corn estimated harvested area and yield.

o Eastern Europe

Production is estimated at 58.8 million tons, up 0.8 million tons or 1 percent from last month, and up 13 percent from last year's drought reduced harvest. The increase is due to improved production prospects for Hungarian barley and rye as well as Polish barley, mixed grains, and oats; which offset decreases in Hungarian corn and Polish rye production.

o China

Production is estimated at 103.6 million tons, up 4.2 million or 4 percent from last month, but down 9 percent from last year's revised estimate. The corn production estimates for 1990 and 1991 were increased by 8 and 5 percent, respectively. The sorghum production estimates also were raised by 9 and 8 percent. These changes were based on new information from Chinese sources. Area was down, but yields were higher than anticipated for both crops.

RICE (MILLED-BASIS): World production for 1991/92 is forecast at 345.8 million tons, up 1.5 million or slightly above last month, but down 2 percent from last year's record crop. Total foreign production in 1991/92 is projected at 340.8 million tons, up 1.5 million, or slightly above last month, but down 2 percent from 1990/91. Country highlights are as follows:

o United States

Production is estimated at 5.0 million tons, virtually unchanged from last month, but down 3 percent from last year.

o China

Production is estimated at 127.4 million tons, up 1.4 million or 1 percent from last month, but down 4 percent from last year's revised record crop. Chinese provincial officials report that the damage to the rice crop from flooding and drought this summer may not be as bad as originally estimated.

o Vietnam

Production is estimated 11.9 million tons, up 0.5 million or 4 percent from last month, but down 5 percent from last year. An increase in area and favorable weather are seen offsetting the shortage of fertilizer for the harvested winter-spring crop and brown plant hopper infestations.

o Burma

Production is estimated at 7.6 million tons, down 0.5 million or 6 percent from last month, and down 8 percent from last year. Heavy flooding in Irrawaddy and Pegu divisions reduced area.

OILSEEDS: Total world oilseeds production during 1991/92 is forecast at a record 218.7 million tons, down 2.1 million or 1 percent from last month, but up 1 percent from 1990/91. Foreign production during 1991/92 is forecast to be a record 158.9 million tons, 0.8 million or less than 1 percent from last month, but up nearly 2 percent from last year. Total oilseed production in the United States is forecast at 59.7 million tons, down 1.4 million or 2 percent from last month and down 1 percent from last year.

- * Soybeans: World production for 1991/92 is forecast at 102.0 million tons, down 2.2 million or 2 percent from last month and down 1 percent from last year. Total foreign soybean output is forecast at 52.5 million tons, down 0.8 million from last month or 2 percent, but up 4 percent from 1990/91. Country highlights are as follows:
 - o United States

Production is estimated at 49.4 million tons, down 1.4 million or 3 percent from last month and down 5 percent from last year. The National Agricultural Statistics Service, USDA, reduced yield projections by nearly 3 percent from last month and down 9 percent from 1990. Above normal temperatures and light rainfall in the Corn Belt States during August reduced yield prospects.

o China

Production is estimated at 10.8 million tons, down 0.7 million or 6 percent from last month and down 2 percent from last year's revised estimate. Official government estimates reduced last year's crop from 11.4 tons to 11.0 million. This month's reduction for 1991/92 is based on lower-than-anticipated planted area and flood damage in Anhui, Jiangsu, and Heilongjiang provinces. Yields are down slightly from last season but still higher than the 5-year average.

o Canada

Production is estimated at 1.2 million tons, down 0.2 million or 9 percent from last month and down 5 percent from last year. Official government estimates from Statistics Canada revised downward both area and yield.

- * Cottonseed: World production for 1991/92 is forecast at 35.0 million tons, up 0.1 million or less than 1 percent from last month and up 4 percent from last year. Total foreign production is forecast at 28.7 million tons, up marginally from last month and up 2 percent from last year. Country highlights are as follows:
 - O United States

 Production is estimated at 6.3 million tons,
 up 0.1 million or 1 percent from last month and
 up 16 percent from 1990/91. Official estimates
 by the National Agricultural Statistics Service
 this month slightly increased expected average
 yield. Favorable weather conditions in the Delta
 States has enhanced yield potential.
 - * <u>Peanuts:</u> World production for 1991/92 is forecast at 22.9 million tons, up 0.2 million or 1 percent from last month and up 3 percent from 1990/91. Total foreign production is forecast at 20.6 million tons, up 0.2 million or 1 percent from last month and up nearly 1 percent from last year. Country highlights are as follows:
 - o United States

Production is estimated at a record 2.3 million tons, down 34,000 tons or 1 percent from last month, but up 39 percent from 1990/91. The National Agricultural Statistics Service expects average yield to recover from last year's level but reduced this month's estimate by 1 percent. Yield expectations in Georgia were reduced due to disease pressure, and North Carolina's crop suffered from excessive soil moisture in August.

o China

Production is estimated at 6.0 million tons, up 0.2 million or 3 percent from last month, but down 6 percent from last year. Higher yields are expected because of generally good weather this summer in the important peanut-growing province of Shandong.

* <u>Sunflowerseed</u>: World production for 1991/92 is forecast at 21.2 million tons, down 0.2 million or 1 percent from last month and down 4 percent from 1990/91. Total foreign production is forecast at 19.7 million tons, down 0.2 million or 1 percent from last month, and down 6 percent from last year. Country highlights are as follows:

o United States

Production is estimated at 1.5 million tons, unchanged from last month, but up 49 percent from last year. Favorable growing conditions characterized early season growth but there has been some deterioration in recent weeks with hot, dry weather. Harvested area is estimated at 1,025,000 hectares, up 37 percent from 1990/91.

o Soviet Union

Production is estimated at 6.0 million tons, down 0.6 million or 9 percent from last month and down 9 percent from last year. Hot, dry weather in several important producing regions has significantly lowered yield expectations.

o EC-12

Production is estimated at 4.1 million tons, up 0.3 million or 9 percent from last month and up slightly above last year's crop. The increase is attributed to favorable weather in France where production is now expected to be a record. Elsewhere, harvested area in Germany was increased, however, the persistent drought in Spain reduced yield and area estimates.

* Rapesed: World production for 1991/92 is forecast at a record 27.2 million tons, up 0.1 million or one-half percent from last month, and up 6 percent from last year. Total foreign production is forecast at 27.1 million tons, up 0.1 million from last month, but up 6 percent from last year. Country highlights are as follows:

o United States

Production is estimated at 105,000 tons, unchanged from last month, but nearly double that of last year. Area and production data for 1987/88 through the 1991/92 are not survey based estimates but are compiled by the Inter-agency Oilseeds Committee and the World Agricultural Outlook Board. The National Agricultural Statistics Service, USDA, is expected to initiate for release survey based U.S. rapeseed area estimates in January 1992.

o EC-12

Production is estimated at 7.3 million tons, up 0.2 million or 3 percent from last month and up 19 percent from 1990/91. In France, favorable weather throughout the growing season boosted average yield near the record, while Denmark's average yield was reduced by outbreaks of plant disease.

* Flaxseed: World production for 1991/92 is forecast at 2.1 million tons, down one-half percent from last month and down 11 percent from last year. While production in the United States is small, this year's output is expected to increase by 18 percent over last year, to 114,000 tons. Total foreign production is pegged at 2.0 million tons, down 10,000 tons from the August estimate, and down 12 percent from last 1990/91. There were no significant country changes this month.

- * Copra: World production for 1991/92 is forecast at 4.7 million tons, down 0.1 million or 2 percent from last month and down less than 1 percent from last year. Copra production reached a record 5.3 million in 1985/86. There were no significant country changes this month.
- * Palm Kernels: World production for 1991/92 is forecast at a record 3.5 million tons, down 50,000 tons or 1 percent from last month, but up 5 percent from last year. There were no significant country changes this month.
- * Palm Oil: World production for 1991/92 is forecast at a record 11.9 million tons, unchanged from last month, but up 8 percent from last year. There were no country changes this month.

COTTON: World cotton production in 1991/92 is estimated at a record 91.6 million bales. This estimate is up 0.5 million bales or 1 percent from last month and up 4.6 million bales or 5 percent from 1990/91. The previous record was 89 million bales harvested in 1984/85. Total foreign production is projected at 73.7 million bales, up 0.2 million bales or less than 1 percent from last month and is a gain of 3 percent over 1990/91. This year's crop is second only to the 1984/85 record of 76 million bales. Country highlights are as follows:

o United States

Production is estimated at 17.9 million bales, up 0.2 million bales or 1 percent from last month and up 15 percent above last year. If realized, this will be the largest crop since 1937/38 when output hit 18.9 million bales. The production increase from the August estimate reflects higher yield expectations. The Delta States of Arkansas, Louisiana, Mississippi, Missouri, and Tennessee account for the largest month-to-month change.

o Australia

Production is estimated at a near record 1.9 million bales, up 0.2 million bales or 12 percent from last month's estimate, but down 2 percent from last year's record output. The production increase is a reflection of an expected increase in area.

o Turkey

Production is estimated at 2.7 million bales, up 0.2 million bales or 7 percent from last month's estimate, but down 10 percent from last year's production level. Cotton continues to make very good progress in virtually all regions under good growing conditions.

o Greece

Production is estimated at 0.8 million bales, down 0.1 million or 14 percent from last month and down 14 percent from last year. Reduced area and excessive rain throughout the season have deteriorated production prospects.

U.S. Crop Acreage, Yield, and Production 1/

e de principa de la principa de la compositorio della compositorio del	PLA	PLANTED AREA	EA	HAR	HARVESTED AREA	REA		YIELD				PRODUCTION	NOIL	
COMMODITY	000	Prel.	Proj.	000	Prel.	Proj.	0000	Prel.	1991/92 Proj.	Proj.	00000	Prel.	1991/92 Proj.	2 Proj.
	1888/80	18/0881	28/1881	1989/90	1830/81	1881/85	1989/90	1830/81	Aug.	Sep.	1989/90	1830/81	Aug.	Sep.
	M	Million Acres		Mil	Million Acres-		Ţ	Bushels per Acre-	er Acre		1	Million Bushels	ushels	•
All Wheat	76.6	77.3	70.0	62.2	69.4	58.1	32.7	39.5	35.0	34.6	2,037	2,739	2,033	2,013
Winter	55.1	57.0	51.0	41.5	20.0	39.5	35.0	40.7	34.7	34.7	1,455	2,033	1,372	1,372
Other	21.5	20.3	19.0	20.7	19.4	18.6	28.1	36.4	35.6	34.5	585	705	661	641
Rye	2.0	1.6	1.7	0.5	0.4	0.4	28.2	23.3	27.6	27.6	14	10	12	12
Soybeans	60.8	57.8	59.8	59.5	56.5	58.6	32.3	34.0	31.8	31.0	1,924	1,922	1,869	1,817
Corn	72.2	74.2	75.9	64.7	67.0	68.7	116.3	118.5	107.8	106.1	7,525	7,933	7,418	7,295
Sorghum	12.6	10.5	11.0	11.1	9.1	9.7	55.4	65.9	57.9	56.2	615	571	595	548
Barley	9.1	8.2	8.9	8.3	7.5	8.4	48.6	55.9	55.8	55.5	404	419	470	468
Oats	12.1	10.4	8.6	6.9	5.9	5.0	54.3	60.1	52.2	52.2	374	357	260	260
							i	Pounds per Acre	er Acre			Million CWT	CWT	
Rice	2.7	2.9	2.9	2.7	2.8	2.8	5,749	5,507	5,544	5,563	154.5	154.9	157.0	157.5
											V- -	Million 480-Pound	bound	
All Cotton	10.6	12.3	14.1	9.5	11.7	13.4	614	634	630	638	12.2	15.5	17.6	17.9

^{1/} Except for estimated rye production, all estimates are from the USDA National Agricultural Statistics Service (NASS) for 1989/90, 1990/91 and 1991/92. Production and yield estimates for rye are from the USDA Interagency Commodity Estimates Committee.

World Crop Production Summary

	ries		15.4	17.7	79.4	81.1	23.2	23.2	194.2	202.7	21.5	22.3		9.5	10.5
₩.	Other					w w	444	14.64	7 7	ี					
her	Turkey		12.5	16.0	7.5	9.7	0.2	0.2	20.2	25.9	2.3	1.6		3.0	2.5
Selected Other	South		2.0	2.0	8.5	8.6	0.0	0.0	11.5	10.6	1.0	0.1		0.3	0.3
Sele	Aus- tralia		14.2	12.0	8. 0. 8. 0.	7.4	0.7	0.0	21.7	20.0	0.7	1.0		1.9	1.7
ø	Brazil		3.2	8 8 6 6	22.5	26.7	6.3 0.5	6. 6. 8. 8.	33.0	36.7	21.8	19.1		3.0	3.5 3.5
South	Argen- tina		10.2	0.0	8.3	10.1	0.2	0.2	18.7	19.3	15.8	15.6		د ن ن	L. L. S. E.
	Thai- land		0.0	0.0	4.4 6.1	4.1	13.3	13.2	17.6	17.3	0.0	0.7		0.1	0.2
	Paki- stan		14.4	14.5	2.9	2.5	യ യ ഗ യ	6, 6, 6, 6,	20.4	20.1	გ. გ.	က က ထ ထ		6.7	7.8
<u>.a</u>	Indo- nesia		0.0	0.0	5.0	5.6	29.1 29.4	28.9	34.1	34.5	2 2 2 2 2	2.3		0.0	0.0
Asia	India		54.1	54.0	34.6 35.0	32.5	74.1	73.0	162.7 159.6	159.5 159.5	19.3	20.2		10.6	10.0
	China	sı	90.8	94.0	93.5	99.4	126.1	126.0	310.4	319.4 325.0	28.5	33.7	ales	17.4	22.0
	USSR	Metric Tons-	92.3	85.5 85.5	104.8	91.5	1.7	1.7	198.8 222.9	178.7	13.8	12.9	Pound B	12.3	11.3
	Eastern	-Million Metric	40.7	39.4 39.4	60.2	58.0	0.1	0.1	101.0	97.6	5.2 4.3	4.2	-Million 480-Pound Bales-	0.1	0.1
Europe	Oth. W. Europe		4.4	4.1	12.4	12.2	0.0	0.0	16.8	16.3	0.7	0.7	Ī	0.0	0.0
	EC-12		82.0	88.5	89.8	89.5	1.6	1.5 1.5 1.5	173.2	180.0	11.5	13.2		1.5	L L
	Mexico		9.6 0.0	မ က က	14.1	16.8	0.4	0.0	18.5	20.5	1.0	===		0.8	0.1
North America	Canada		24.6	31.0	23.5	25.9	0.0	0.0	48.0 58.8	56.9	4.9 5.6	6.3		0.0	0.0
North	United		55.4 74.5	55.3 54.8	221.4	217.1	5.1	5.0	281.9	277.4	59.3 60.5	61.1		12.2	17.6
	Total Foreign		482.2	495.2 496.1	579.0 604.1	581.6	339.5 347.2	339.3 340.8	1,400.7	1,416.0	154.8	159.7		67.8	73.5
	World		537.6	550.5	800.3	798.6	344.6 352.3	345.8	1,682.6	1,693.4	214.1	220.8		80.0	91.1
	Commodity		Wheat 1989/90 1990/91 prel.	1991/92 proj. August September	Coarse Grains 1989/90 1990/91 prel.	1991/92 proj. August September	Rice (Milled) 1989/90 . 1990/91 prel.	1991/92 proj. August September	ins 1/ prel.	August September	Oilseeds 2/ 1989/90 1990/91 prel.	1991/92 proj. August September		Cotton 1989/90 1990/91 prel.	1991/92 proj. August September

Includes total of wheat, coarse grains, and rice (milled) shown above. Estimates of Soviet total grain production, including wheat, coarse grains, rice (rough), minor grains and 190.0 million in 1990/91, and 190.0 million forecast in 1991/92.
 Totals for major regions and countries include the six major oilseeds shown elsewhere in this report, while world and total foreign also include copra and palm kernels for all countries.
 Note: Entries of 0.0 indicate no reported or insignificant production.

Wheat Area, Yield, and Production
World and Selected Countries and Regions

TABLE 3

		AREA			YIEL	_D			PRODU	CTION,	
COUNTRY/REGION	1989/90	Prel. 1990/91	Proj. 1991/92	1989/90	Prel. 1990/91	1991/9 Aug .	2 Proj. Sept	1989/90	Prel. 1990/91	1991/92 A ug.	Proj. Sept
	Mill	ion Hecta	res	M e	tric Tons	Per Hec	tare	1	Million M e	tric Tons	
World	226.3	231.9	223.4	2.38	2.56	2.46	2.47	537.6	593.8	550.5	550.9
United States	25.2	28.1	23.5	2.20	2.66	2.35	2.33	55.4	74.5	55.3	54.8
Total Foreign	201.1	203.8	199.9	2.40	2.55	2.47	2.48	482.2	519.3	495.2	496.1
Maj. Foreign Exporters	45.1	45.8	44.3	2.91	3.13	3.21	3.20	131.0	143.3	141.0	141.5
Argentina	5.5	5.7	4.9	1.86	1.84	1.84	1.84	10.2	10.5	9.0	9.0
Australia	9.0	9.2	7.8	1.58	1.67	1.50	1.47	14.2	15.4	12.0	11.5
Canada	13.6	14.4	14.7	1.80	2.27	2.20	2.21	24.6	32.7	31.0	32.5
EC-12	17.0	16.5	16.9	4.83	5.14	5.24	5.25	82.0	84.7	89.0	88.5
Major Importers	96.4	98.1	95.6	2.48	2.67	2.46	2.46	238.8	261.4	235.3	235.2
Brazil	3.4	3.3	2.4	1.65	0.97	1.33	1.33	5.6	3.2	3.2	3.2
China	29.8	30.8	30.7	3.04	3.19	3.06	3.06	90.8	98.2	94.0	94.0
Eastern Europe	9.8	9.7	9.8	4.14	4.22	4.03	4.02	40.7	41.1	39.4	39.4
Egypt	0.6	0.7	8.0	5.05	5.79	6.40	6.40	3.2	4.3	4.8	4.8
Other N. Africa 1/	4.7	5.1	5.2	1.13	1.11	1.44	1.44	5.3	5.6	7.5	7.5
Japan	0.3	0.3	0.2	3.47	3.66	3.51	3.51	1.0	1.0	0.9	0.9
USSR	47.7	48.2	46.5	1.94	2.24	1.84	1.84	92.3	108.0	85.5	85.5
Other Foreign	59.7	60.0	60.1	1.88	1.91	1.96	1.99	112.4	114.5	118.8	119.4
India	24.1	23.5	24.3	2.24	2.12	2.22	2.22	54.1	49.7	54.0	54.0
Iran	6.8	6.5	6.2	0.81	1.08	1.15	1.15	5.5	7.0	7.1	7.1
Mexico	1.0	1.0	0.9	4.21	4.11	3.98	3.98	4.0	3.9	3.5	3.5
Non-EC W. Europe	0.8	0.9	8.0	5.19	5.48	5.01	5.16	4.4	5.1	4.1	4.0
Pakistan	7.7	7.8	8.0	1.87	1.82	1.82	1.82	14.4	14.3	14.5	14.5
South Africa	1.8	1.6	1.4	1.11	1.10	1.08	1.48	2.0	1.7	2.0	2.1
Turkey	8.7	8.8	8.9	1.44	1.71	1.80	1.80	12.5	15.0	16.0	16.0
Others	8.8	10.0	9.7	1.76	1.79	1.83	1.88	15.4	17.9	17.7	18.2

^{1/} Algeria, Libya, Morocco, and Tunisia.

SEPTEMBER 1991

TABLE 4
Coarse Grains Area, Yield, and Production
World and Selected Countries and Regions

		AREA			YIELI)			PRODU	JCTION	
COUNTRY/REGION	1989/90	Prel.	Proj. 1 9 91/92	1089/00	Prel.	1991/92 Aug.	2 Proj. Sept	1989/90	Prel.	1991/92 Aug.	Proj. Sept
TOTAL COARSE GRAINS		on Hecta				Per Hec			illion Met		
World 1/	321.0	319.0	320.4	2.49	2.62	2.49	2.48	800.3	834.7	798.6	795.1
United States	37.0	36.4	37.4	5.98	6.34	5.81	5.71	221.4	230.6	217.1	213.5
Total Foreign	284.0	282.6	283.0	2.04	2.14	2.05	2.06	579.0	604.1	581.6	581.6
Maj. Foreign Exporters Argentina Australia Canada South Africa Thailand	21.3 3.2 4.0 8.3 4.4 1.6	20.7 3.3 4.2 7.9 3.8 1.5	21.5 3.6 4.8 7.6 4.0 1.5	2.46 2.64 1.73 2.84 2.18 2.78	2.74 3.43 1.65 3.30 2.20 2.65	2.57 2.88 1.53 3.31 2.07 2.72	2.50 2.86 1.53 3.09 2.15 2.65	52.5 8.3 6.8 23.5 9.5 4.3	56.7 11.2 6.9 26.1 8.5 4.1	56.0 10.1 7.4 25.9 8.6 4.1	53.7 10.2 7.3 23.6 8.6 4.0
Major Importers Eastern Europe EC-12 Other W. Europe Mexico USSR Other Major Import. 2/	103.8 16.5 20.3 3.1 7.5 56.0 0.4	99.8 15.9 19.3 3.0 8.2 52.9 0.4	100.5 16.2 19.0 2.8 8.5 53.5 0.4	2.72 3.66 4.43 3.97 1.88 1.87 3.83	2.84 3.28 4.36 4.49 2.23 2.14 3.63	2.68 3.63 4.66 4.10 1.98 1.71 3.70	2.67 3.63 4.59 4.16 1.98 1.71 3.70	282.9 60.2 89.8 12.4 14.1 104.8 1.6	283.1 52.2 84.1 13.6 18.4 113.3 1.5	269.6 58.0 89.5 12.2 16.8 91.5 1.5	267.9 58.8 87.5 11.8 16.8 91.5
Other Foreign Brazil China India Indonesia Nigeria Philippines Turkey Others	158.9 12.5 28.2 37.7 2.7 9.9 3.6 4.4 59.8	162.1 13.5 29.1 38.9 2.9 9.5 3.8 4.5 60.0	161.0 13.5 28.6 37.6 3.0 9.9 3.9 4.5 60.1	1.53 1.79 3.31 0.92 1.85 0.82 1.24 1.70 1.14	1.63 1.79 3.90 0.90 1.83 0.67 1.24 1.99 1.11	1.59 1.98 3.52 0.86 1.84 0.84 1.24 2.17 1.15	1.62 1.98 3.62 0.86 1.83 0.84 1.24 2.17 1.15	243.6 22.5 93.5 34.6 5.0 8.1 4.5 7.5 67.9	264.3 24.2 113.5 35.0 5.3 6.3 4.7 8.9 66.5	256.0 26.7 99.4 32.5 5.6 8.3 4.9 9.7 68.9	260.0 26.7 103.6 32.5 5.4 8.3 4.9 9.7 69.0
BARLEY											
World	74.7	73.8	76.5	2.27	2.53	2.28	2.25	169.8	186.3	174.1	172.5
United States	3.4	3.0	3.4	2.62	3.00	3.00	2.99	8.8	9.1	10.2	10.2
Total Foreign	71.4	70.7	73.1	2.26	2.51	2.25	2.22	161.0	177.2	163.8	162.3
Australia Canada China Eastern Europe EC-12 Other W. Europe Turkey USSR Others	2.3 4.7 3.3 3.6 12.6 1.5 3.4 27.6 12.4	2.5 4.8 3.3 3.6 12.3 1.5 3.4 26.1 13.3	2.8 4.9 3.3 3.8 12.0 1.5 3.4 28.5 13.0	1.75 2.50 1.74 4.03 4.05 3.87 1.46 1.75 1.19	1.65 2.97 1.73 4.00 4.13 4.35 1.76 2.34 1.11	1.50 3.09 1.73 3.82 4.18 3.91 2.00 1.65 1.20	1.50 2.68 1.73 3.82 4.15 3.90 2.00 1.65 1.20	4.0 11.7 5.7 14.5 51.0 5.9 4.9 48.5 14.8	4.2 14.2 5.7 14.3 50.8 6.4 6.0 61.0 14.7	4.4 14.5 5.7 13.8 50.3 5.9 6.8 47.0 15.5	4.2 13.0 5.7 14.4 49.7 5.9 6.8 47.0 15.6

FOOTNOTES AT END OF TABLE

SEPTEMBER 1991

Coarse Grains Area, Yield, and Production
World and Selected Countries and Regions -- Continued

		AREA			YIELD				PRODU	ICTION	
COUNTRY/REGION	1989/90	Prel. 1990/91	Proj. 1991/92	1989/90	Prel. 1990/91	1991/92 Aug.	Proj. Sept	1989/90	Prel. 1990/91	1991/92 Aug.	Proj. Sept
CORN	Milli	on Hecta	res	Met	ric Tons	Per Hec	tare	M	lillion M et	ric Tons-	
World	126.1	127.1	129.8	3.66	3.76	3.62	3.61	460.9	477.9	469.4	468.5
United States	26.2	27.1	27.8	7.30	7.44	6.77	6.66	191.2	201.5	188.4	185.3
Total Foreign	99.9	100.0	102.0	2.70	2.76	2.76	2.78	269.7	276.4	281.0	283.2
Maj. Foreign Exporters Argentina South Africa Thailand	6.7 1.7 3.6 1.4	6.4 2.0 3.1 1.4	6.8 2.2 3.3 1.3	2.72 3.06 2.47 2.93	3.05 4.00 2.55 2.81	2.75 3.27 2.35 2.88	2.79 3.27 2.46 2.80	18.2 5.2 8.9 4.1	19.5 7.8 7.9 3.8	19.0 7.2 8.0 3.8	18.9 7.2 8.0 3.7
Major Importers Eastern Europe EC-12 Other W. Europe Mexico USSR Other Maj. Import. 2/	21.2 7.1 3.9 0.2 5.8 4.1 0.1	19.7 6.5 3.4 0.2 6.6 2.8 0.1	21.3 6.6 3.9 0.2 7.0 3.5 0.1	3.93 4.14 6.91 7.68 1.68 3.71 4.28	3.50 3.26 6.27 7.91 2.14 3.50 4.10	3.90 4.29 7.07 7.88 1.83 3.43 4.18	3.85 4.27 6.95 7.88 1.83 3.43 4.18	83.3 29.2 26.9 1.7 9.8 15.3 0.5	68.8 21.1 21.6 1.8 14.1 9.8 0.5	83.5 28.3 28.3 1.7 12.8 12.0 0.5	82.0 28.2 26.8 1.7 12.8 12.0 0.5
Other Foreign Brazil Canada China Egypt India Indonesia Philippines Zimbabwe Others	72.0 12.1 1.0 20.4 0.8 5.9 2.7 3.6 1.2 24.3	74.0 13.0 1.0 21.4 0.8 5.9 2.9 3.8 1.1 24.0	74.0 13.0 1.1 21.0 0.9 5.7 3.0 3.9 1.2 24.3	2.34 1.80 6.36 3.88 5.37 1.61 1.85 1.24 1.72	2.54 1.81 6.91 4.52 5.43 1.61 1.83 1.24 1.45	2.42 2.00 6.00 4.08 5.59 1.49 1.84 1.24 1.67	2.46 2.00 6.06 4.19 5.59 1.49 1.83 1.24 1.67 1.49	168.2 21.8 6.4 78.9 4.5 9.4 5.0 4.5 2.0 35.7	188.1 23.5 7.2 96.8 4.6 9.5 5.3 4.7 1.6 34.9	178.4 26.0 6.6 84.0 4.8 8.5 5.6 4.9 2.0 36.1	182.3 26.0 6.6 88.0 4.8 8.5 5.4 4.9 2.0 36.2
SORGHUM											
World	40.6	39.6	39.9	1.35	1.36	1.33	1.33	54.8	53.6	53.1	53.0
United States	4.5	3.7	3.9	3.48	3.95	3.64	3.53	15.6	14.5	14.3	13.9
Total Foreign	36.1	35.9	35.9	1.08	1.09	1.08	1.09	39.1	39.1	38.8	39.1
Argentina Australia China India Mexico Nigeria South Africa Sudan Thailand Others	0.7 0.4 1.6 14.9 1.3 4.4 0.2 3.1 0.2 9.2	0.7 0.5 1.5 15.0 1.3 4.4 0.2 3.0 0.2 9.1	0.7 0.6 1.5 15.0 1.2 4.4 0.2 3.0 0.2 9.2	2.86 2.27 2.72 0.86 2.88 0.80 1.11 0.52 1.44 1.03	3.57 1.95 3.71 0.83 2.85 0.64 1.12 0.50 1.39 1.00	2.86 2.00 3.17 0.83 2.92 0.80 1.11 0.50 1.47 1.01	2.86 1.92 3.47 0.83 2.92 0.80 1.11 0.50 1.47 1.01	2.0 0.9 4.4 12.9 3.8 3.5 0.3 1.6 0.2 9.5	2.5 0.9 5.7 12.5 3.7 2.8 0.2 1.5 0.3 9.1	2.0 1.0 5.0 12.5 3.5 3.5 0.3 1.5 0.3 9.3	2.0 1.1 5.2 12.5 3.5 3.5 0.3 1.5 0.3 9.3

FOOTNOTES AT END OF TABLE

SEPTEMBER 1991

TABLE 4 Coarse Grains Area, Yield, and Production World and Selected Countries and Regions -- Continued

		AREA			YIELI)			PRODU	JCTION	
COUNTRY/REGION	1989/90	Prel. 1990/91	Proj. 1991/92	1989/90	Prel. 1990/91	1991/92 Aug.	2 Proj. Sept	1989/90	Prel. 1990/91	1991/92 Aug.	Proj. Sept
OATS	Milli	ion Hecta	res	Met	ric Tons	Per Hec	tare	N	lillion M et	ric Tons-	
World	22.6	21.3	20.4	1.83	1.98	1.79	1.75	41.4	42.3	37.8	35.7
United States	2.8	2.4	2.0	1.95	2.16	1.87	1.87	5.4	5.2	3.8	3.8
Total Foreign	19.8	18.9	18.4	1.82	1.96	1.78	1.74	36.0	37.1	34.0	31.9
USSR	10.8	10.7	10.5	1.57	1.68	1.43	1.43	16.8	18.0	15.0	15.0
Maj. Foreign Exporters Argentina Australia Canada Sweden	3.7 0.4 1.1 1.7 0.4	3.0 0.3 1.1 1.2 0.4	3.0 0.4 1.3 1.0 0.3	1.97 1.44 1.44 2.08 3.54	2.17 1.34 1.48 2.34 4.42	2.10 1.29 1.38 2.44 3.86	2.03 1.29 1.38 2.42 4.09	7.3 0.6 1.6 3.5 1.5	6.4 0.4 1.6 2.9 1.6	7.2 0.5 1.8 3.3 1.6	6.1 0.5 1.8 2.4 1.4
Other Foreign China Eastern Europe Czechoslovakia Poland EC-12 France Germany Finland Norway Others	5.4 0.6 1.2 0.1 0.8 1.8 0.3 0.6 0.4 0.1 1.3	5.3 0.6 1.2 0.1 0.7 1.6 0.2 0.6 0.5 0.1	4.9 0.6 1.2 0.1 0.7 1.4 0.2 0.4 0.3 0.1 1.2	2.21 1.20 2.55 3.24 2.72 2.74 3.73 3.58 3.24 3.13 1.12	2.41 1.21 2.70 4.55 2.84 3.07 3.86 3.93 3.67 4.58 1.09	2.30 1.18 2.56 4.00 2.70 3.02 3.81 4.44 3.28 4.00 1.11	2.22 1.18 2.54 4.00 2.67 2.89 3.81 4.44 3.23 4.00 1.11	11.9 0.7 3.2 0.3 2.2 4.8 1.0 2.0 1.4 0.4 1.4	12.6 0.7 3.3 0.4 2.1 5.1 0.9 2.4 1.7 0.6 1.4	11.8 0.7 3.0 0.4 1.9 4.9 0.8 2.4 1.3 0.5 1.4	10.9 0.7 3.0 0.4 1.9 4.2 0.8 1.7 1.1 0.5 1.4
RYE											
World	16.9	16.6	13.5	2.22	2.33	2.22	2.21	37.6	38.7	30.1	29.7
United States	0.2	0.2	0.2	1.77	1.70	1.73	1.73	0.3	0.3	0.3	0.3
Total Foreign	16.7	16.5	13.3	2.23	2.34	2.23	2.21	37.2	38.5	29.8	29.4
USSR	10.7	10.4	8.0	1.87	2.02	1.75	1.75	20.1	21.0	14.0	14.0
<i>Maj. Foreign Exporter</i> Canada	0.5	0.4	0.2	1.74	1.68	1.69	1.78	0.9	0.7	0.5	0.4
Other Foreign Eastern Europe Hungary Poland Czechoslovakia EC-12 Denmark Germany Others	3.3 0.1 2.9 0.2 1.6 0.1 1.0 0.6	3.4 0.1 3.1 0.2 1.6 0.1 1.0	3.4 0.1 3.0 0.2 1.2 0.1 0.7 0.5	2.94 2.06 2.95 4.05 3.32 4.82 3.86 2.29	2.88 2.46 2.86 4.26 3.40 4.95 3.87 2.38	2.85 2.22 2.85 3.82 3.83 4.84 4.93 2.17	2.82 2.40 2.82 3.82 3.66 4.84 4.64 2.20	9.7 0.2 8.6 0.7 5.2 0.5 3.9 1.3	9.9 0.2 8.8 0.7 5.4 0.5 4.0 1.5	9.6 0.2 8.6 0.7 4.7 0.5 3.5 1.0	9.5 0.2 8.5 0.7 4.5 0.5 3.3 1.0

^{1/} Total of barley, corn, sorghum, oats, and rye shown below, plus millet and mixed grain. 2/ Japan, Republic of Korea, and Taiwan.

SEPTEMBER 1991

Rice Area, Yield, and Production World and Selected Countries and Regions

-					TIELD				(Rough Basis)	(Rough Basis)							(Milled Basis)	isis)	
	1989/90	Prel.	Proj.	1989/90	Prel. 1990/91	1991/92 Proj. Aug. Sept		1 06/6861	Prel. 1990/91	1991/92 Proj. Aug. Sep		1989/90	Prel. 1990/91	1991/92 Proj. Aug. Sep	. +	1989/90	Prel. 1990/91	1991/92 Proj. Aug. Sep	Proj.
		-Million Hectares-	sə	Metric	-Metric Tons Per Hectare	Hectare—		₩ 	Million Metric Tons	ic Tons-			-In Percent-	ent		-W	Million Metric Tons	c Tons-	ł
World	146.4	146.9	147.0	3.5	3.5	3.5	3.5	508.7	519.8	9.809	510.5	67.7	67.8	2.79	67.7	344.6	352.3	344.2	345.8
United States	=	1.	F	6.4	6.2	6.2	6.2	7.0	7.0	7.1	7.1	73.0	73.0	70.0	70.0	5.1	5.1	5.0	5.0
Total Foreign	145.3	145.8	145.9	3.5	3.5	3.4	3.5	501.7	512.8	501.5	503.3	67.7	67.7	67.6	67.5	339.5	347.2	339.3	340.8
Mai Foreign Exporters	16.8	16.6	16.6	2.3	2.2	2.3	2.3	38.5	35.9	38.2	37.6	64.0	63.8	64.0	64.1	24.6	22.9	24.4	24.1
Burma	4.7	4.8	4.5	2.9	2.9	2.9	2.8	13.5	13.7	13.4	12.6	0.09	0.09	0.09	0.09	8.1	8.2	8.0	7.6
Pakistan	2.1	2.1	2.1	2.3	2.3	2.3	2.3	4.8	4.9	4.8	5.0	2.99	2.99	2.99	66.7	3.2	3.3	3.2	3.3
Thailand	10.0	9.7	10.0	2.0	1.8	2.0	2.0	20.2	17.3	20.0	20.0	0.99	0.99	0.99	0.99	13.3	11.4	13.2	13.2
Major Importers	13.9	13.9	13.6	4.2	4.2	4.2	4.2	58.6	58.4	27.79	57.6	66.1	0.99	66.1	66.1	38.7	38.6	38.1	38.1
EC-12	0.3	0.4	0.4	6.2	6.4	0.9	0.9	2.1	2.4	2.3	2.3	0.79	67.4	67.4	67.4	1.4	1.6	1.5	1.5
Indonesia	10.5	10.5		4.2	4.3	4.3	4.4	44.7	45.2	44.5	44.4	0.59	0.59	0.59	0.59	29.1	29.4	28.9	28.9
Nigeria	9.0	0.7		1.4	1.4	1.4	1.4	6.0	6.0	6.0	6.0	0.09	0.09	0.09	0.09	0.5	9.0	9.0	9.0
Republic of Korea	1.3	1.2	1.2	6.4	6.2	6.4	6.4	8.1	7.7	7.8	7.8	72.8	72.6	72.7	72.7	5.9	9.6	5.7	5.7
Other Maj. Import. 1/	1.2	Ξ.	1.1	2.4	1.9	2.0	2.0	2.8	2.2	2.2	2.2	65.5	65.4	65.7	65.8	2	1.4	1.5	1.5
Other Foreign	114.6	115.3	115.7	3.5	3.6	3.5	3.5	404.6	418.5	405.6	408.2	68.3	68.3	68.2	68.3	276.1	285.8	276.7	278.6
Australia	0.1	0.1	0.1	8.0	8.8	7.9	8.3	6.0	8.0	6.0	1.	71.5	71.5	71.5	71.5	0.7	9.0	9.0	8.0
Bangladesh	10.5	10.4	10.5	2.6	2.6	2.6	2.6	26.8	56.9	27.6	27.6	66.7	2.99	2.99	66.7	17.9	17.9	18.4	18.4
Brazil	4.3	4.5	5.3	1.7	2.1	1.9	6.1	7.2	9.3	10.0	10.0	0.89	0.89	68.0	0.89	4.9	6.3	6.8	6 .8
China	32.7	33.1	32.6	5.5	5.7	5.5	9.6	180.1	189.3	180.0	182.0	70.0	70.0	70.0	70.0	126.1	132.5	126.0	127.4
India	42.2	42.2	42.0	2.6	2.7	5.6	5.6	111.1	112.5	109.5	109.5	2.99	2.99	2.99	66.7	74.1	75.0	73.0	73.0
Japan	2.1	2.1	2.1	6.2	6.3	6.2	6.2	12.9	13.1	12.9	12.9	72.8	72.8	72.8	72.8	9.4	9.6	9.4	9.4
Philippines	3.4	3.5	3.6	2.6	2.7	2.6	2.6	8.9	9.4	9.6	9.5	65.0	65.0	0.59	65.0	5.8	6.1	6.2	6.2
USSR	0.7	9.0	0.7	3.9	4.0	4.0	4.0	2.6	2.4	5.6	2.6	65.0	0.59	0.59	65.0	1.7	1.6	1.7	1.7
Vietnam	5.7	5.7	5.9	3.3	3.3	3.0	3.0	19.0	19.0	17.5	18.0	0.99	0.99	0.59	0.99	12.5	12.5	11.4	11.9
Others	12.9	13.2	12.9	2.7	2.7	2.7	2.7	35.0	35.8	35.1	34.9	66.1	66.2	1.99	66.2	23.2	23.7	23.2	23.1

1/ Hong Kong, Iran, Iraq, Ivory Coast, and Saudi Arabia.

Oilseeds Area, Yield, and Production
World and Selected Countries and Regions

		AREA			YIELD				PRODU	CTION	
COUNTRY/REGION		Prel.	Proj.		Prel.	1991/9	2 Proj.		Prel.	1991/	92 Proj.
	1989/90	1990/91	1991/92	1989/90	1990/91	Aug.	Sept	1989/90	1990/91	Aug.	Sept
	Milli	on Hecta	res	Metr	ric Tons Pe	er Hectar	e	M	lillion M et	ric Tons-	
<u>SOYBEANS</u>											
World	58.26	54.01	55.44	1.84	1.91	1.86	1.84	107.27	102.98	104.22	101.99
United States	24.09	22.87	23.73	2.17	2.29	2.14	2.08	52.35	52.30	50.86	49.45
Total Foreign	34.16	31.15	31.72	1.61	1.63	1.66	1.66	54.92	50.68	53.36	52.54
Maj. Foreign Exporters Argentina Brazil	16.35 4.95 11.40	14.40 4.75 9.65	15.00 5.00 10.00	1.90 2.17 1.78	1.83 2.27 1.61	1.88 2.15 1.75	1.88 2.15 1.75	31.09 10.75 20.34	26.30 10.80 15.50	28.25 10.75 17.50	28.25 10.75 17.50
Other Foreign Canada China Eastern Europe EC-12 India Indonesia Paraguay USSR Others	17.81 0.54 8.06 0.70 0.63 2.13 1.21 0.98 0.83 2.74	16.75 0.49 7.56 0.36 0.69 2.30 1.24 0.89 0.83 2.39	16.72 0.58 7.50 0.28 0.58 2.40 1.26 0.90 0.81 2.42	1.34 2.26 1.27 0.97 3.13 0.80 1.09 1.61 1.15	1.46 2.64 1.46 1.07 3.12 1.04 1.09 1.46 1.06	1.46 2.33 1.45 1.30 3.14 1.00 1.11 1.78 1.14 1.56	1.45 2.14 1.44 1.30 3.14 1.00 1.11 1.78 1.14 1.56	23.83 1.22 10.23 0.68 1.98 1.72 1.32 1.58 0.96 4.17	24.38 1.29 11.00 0.39 2.17 2.40 1.35 1.30 0.88 3.61	25.11 1.35 11.50 0.36 1.81 2.40 1.40 1.60 0.92 3.77	24.29 1.23 10.80 0.36 1.81 2.40 1.40 1.60 0.92 3.78
COTTONSEED			:								
World	32.05	33.51	34.92	0.96	1.00	1.00	1.00	30.92	33.59	34.87	34.97
United States	3.86	4.75	5.44	1.10	1.14	1.14	1.15	4.24	5.41	6.19	6.26
Total Foreign China India Pakistan USSR Others	28.19 5.20 7.33 2.60 3.33 9.73	28.77 5.59 7.60 2.69 3.15 9.74	29.48 6.00 7.80 2.78 3.00 9.90	0.95 1.24 0.60 1.12 1.53 0.80	0.98 1.37 0.53 1.21 1.56 0.85	0.97 1.36 0.54 1.23 1.53 0.84	0.97 1.36 0.54 1.23 1.53 0.84	26.68 6.44 4.40 2.91 5.11 7.82	28.18 7.66 4.00 3.27 4.92 8.32	28.68 8.16 4.20 3.40 4.60 8.32	28.71 8.16 4.20 3.40 4.60 8.35
<u>PEANUTS</u>											
World	19.82	19.47	19.92	1.11	1.14	1.14	1.15	22.06	22.11	22.69	22.86
United States	0.67	0.73	0.79	2.72	2.23	2.91	2.87	1.81	1.63	2.31	2.28
Total Foreign Argentina China India Senegal South Africa Sudan Others	19.16 0.18 2.96 8.71 0.78 0.09 0.55 5.89	18.74 0.20 2.91 8.10 0.92 0.09 0.54 5.99	19.13 0.19 3.02 8.30 0.90 0.09 0.53 6.10	1.06 1.87 1.81 0.93 1.04 1.28 0.73 0.87	1.09 2.37 2.19 0.90 0.73 1.59 0.60 0.87	1.07 2.11 1.92 0.92 0.77 1.50 0.75 0.88	1.08 2.11 1.99 0.92 0.77 1.50 0.75 0.88	20.25 0.34 5.37 8.09 0.82 0.11 0.40 5.13	20.48 0.48 6.37 7.30 0.67 0.14 0.33 5.21	20.38 0.40 5.80 7.60 0.70 0.14 0.40 5.35	20.58 0.40 6.00 7.60 0.70 0.14 0.40 5.35

Oilseeds Area, Yield, and Production
World and Selected Countries and Regions -- Continued

		AREA			YIELD				PRODU	CTION	
COUNTRY/REGION		Prel.	Proj.		Prel.	1991/9	2 Proj.		Prel.	1991/9	92 Proj.
	1989/90	1990/91	1991/92	1989/90	1990/91	Aug.	Sept	1989/90	1990/91	Aug.	Sept
	Milli	on Hecta	res	Metri	ic Tons P	er Hectar	0	M	illion Met	ric Tons-	
SUNFLOWERSEED											
World	15.88	15.89	15.97	1.38	1.39	1.36	1.33	21.87	22.02	21.43	21.23
United States	0.72	0.75	1.03	1.10	1.38	1.50	1.50	0.80	1.03	1.54	1.54
Total Foreign	15.16	15.14	14.94	1.39	1.39	1.35	1.32	21.07	20.98	19.89	19.69
Argentina	2.80	2.30	2.50	1.36	1.70	1.40	1.40	3.80	3.90	3.50	3.50
China	0.72	0.70	0.71	1.49	1.71	1.62	1.62	1.06	1.20	1.15	1.15
EC-12	2.13	2.55	2.39	1.67	1.61	1.66	1.71	3.54	4.09	3.75	4.10
	1.27	1.23	1.17	1.81	1.70	1.77	1.77	2.29	2.09	2.08	2.08
East Europe				1				1			
USSR	4.46	4.67	4.60	1.59	1.41	1.43	1.30	7.07	6.56	6.60	6.00
Others	3.80	3.70	3.57	0.87	0.85	0.80	0.80	3.32	3.15	2.81	2.87
RAPESEED											
World	17.12	18.12	19.89	1.28	1.42	1.37	1.37	21.85	25.67	27.09	27.22
United States 1/	0.03	0.03	0.06	1.58	1.74	1.75	1.75	0.05	0.05	0.11	0.11
Total Foreign	17.09	18.09	19.83	1.28	1.42	1.36	1.37	21.80	25.62	26.99	27.11
Canada	2.90	2.58	3.27	1.07	1.27	1.31	1.28	3.10	3.28	4.20	4.20
China	4.99	5.50	6.10	1.09	1.26	1.16	1.16	5.44	6.96	7.10	7.10
							3.00	5.34	6.14	7.07	7.28
EC-12	1.81	2.13	2.43	2.96	2.89	2.94					
East Europe	0.81	0.74	0.69	2.66	2.38	2.48	2.41	2.15	1.75	1.69	1.66
India	4.99	5.60	5.70	0.83	1.02	0.88	0.88	4.12	5.70	5.00	5.00
Others	1.59	1.54	1.65	1.04	1.16	1.12	1.14	1.65	1.78	1.93	1.88
FLAXSEED											
World	3.74	3.79	3.51	0.50	0.62	0.58	0.59	1.85	2.34	2.10	2.09
United States	0.07	0.10	0.12	0.47	0.95	0.97	0.97	0.03	0.10	0.11	0.11
Total Foreign	3.67	3.69	3.39	0.50	0.61	0.57	0.58	1.82	2.24	1.98	1.97
Total Foreign				1		0.84	0.84	0.52	0.48	0.46	0.38
Argentina	0.58	0.58	0.45	0.90	0.83			i		0.43	0.70
Canada	0.60	0.73	0.54	0.83	1.29	1.16	1.30	0.50	0.94		
India	1.18	1.20	1.20	0.29	0.33	0.33	0.33	0.34	0.40	0.40	0.40
USSR	0.97	0.85	0.85	0.24	0.19	0.21	0.21	0.23	0.16	0.18	0.18
Others	0.36	0.34	0.35	0.67	0.77	0.89	0.89	0.24	0.26	0.32	0.31
MAJOR OILSEEDS	146.87	144.80	149.65	1.40	1.44	1.42	1.41	205.83	208.71	212.40	210.36
		60.05	04.17	0.01	0.07	4.00	1.92	59.29	60.53	61.12	59.75
United States Total Foreign	29.44	29.23 115.57	31.17 118.48	2.01	2.07 1.28	1.96 1.27	1.92	146.54	148.18	151.28	150.61
COPRA	un dit							4.90	4.74	4.81	4.71
PALM KERNEL								3.33	3.31	3.59	3.59
TOTAL OILSEEDS								214.07	216.76	220.80	218.66
								10.91	11.04	11.91	11.91
PALM OIL 2/											

^{1/} U.S. rapeseed estimates by the WAOB and Interagency Oilseeds Committee. 2/ Not included in total oilseeds.

SEPTEMBER 1991

TABLE 7

Cotton Area, Yield, and Production World and Selected Countries and Regions

		REA			YIEL	.D		PI	RODUCT	TION	
COUNTRY/REGION		Prel.	Proj.		Prel.	1991/92	2 Proj.		Prel.	1991/92	2 Proj.
	1989/90	1990/91	1991/92	1989/90	1990/91	Aug.	Sept	1989/90	1990/91	Aug.	Sept
	Millio	on Hect	ares	Kild	ograms P	er Hecta	are	Milli	on 48 0-l	Pound B	ales
World	31.6	33.3	34.8	552	569	570	573	80.0	87.0	91.1	91.6
United States	3.9	4.7	5.4	688	711	706	715	12.2	15.5	17.6	17.9
Total Foreign	27.7	28.6	29.4	533	545	545	547	67.8	71.5	73.5	73.7
Maj. Foreign Exporters	13.1	13.2	13.6	727	790	775	780	43.7	48.0	48.4	48.7
Australia	0.2	0.3	0.3	1,326	1,563	1,322	1,379	1.4	1.9	1.7	1.9
Central America 1/	0.1	0.1	0.1	832	802	793	793	0.3	0.3	0.3	0.3
China	5.2	5.6	6.0	728	807	798	798	17.4	20.7	22.0	22.0
Egypt	0.4	0.4	0.4	683	719	755	755	1.3	1.4	1.3	1.3
Mexico	0.2	0.2	0.3	891	913	837	837	0.8	0.8	1.0	1.0
Pakistan	2.6	2.7	2.8	560	607	612	612	6.7	7.5	7.8	7.8
Sudan	0.3	0.2	0.2	456	422	498	498	0.6	0.4	0.4	0.4
Turkey	0.7	0.6	0.6	851	1,021	887	956	2.8	3.0	2.5	2.7
USSR	3.3	3.2	3.0	805	827	817	817	12.3	12.0	11.3	11.3
Major Importers 2/	0.4	0.4	0.3	887	801	911	833	1.5	1.5	1.4	1.3
Other Foreign	14.2	14.9	15.4	346	321	334	334	22.6	22.0	23.6	23.6
Argentina	0.6	0.6	0.6	486	444	465	465	1.3	1.3	1.3	1.3
Brazil	1.9	2.0	2.0	347	340	381	381	3.0	3.1	3.5	3.5
India	7.3	7.6	7.8	315	264	279	279	10.6	9.2	10.0	10.0
Syria	0.2	0.2	0.2	930	963	934	934	0.7	0.7	0.7	0.7
Others	4.3	4.6	4.9	358	370	368	368	7.0	7.7	8.2	8.2

^{1/} Nicaragua, Guatemala, El Salvador, Honduras, and Costa Rica.

SEPTEMBER 1991

^{2/} Western Europe, Eastern Europe, Japan, Hong Kong, Republic of Korea, and Taiwan.

The table below presents a 10-year record of the difference between the September projections and the final estimates. Using world wheat production as an example, changes between the September projection and the final estimate have averaged 10.9 million tons (2.2 percent) and ranged from -30.7 to 6.8 million tons. The September projection has been below the final 6 times and above the final 4 times.

RELIABILITY OF PRODUCTION PROJECTIONS

COMMODITY AND	PROJECTION AND FINAL ESTIMATES, 1981/82 - 1990/91 1/					
REGION	Differ	ence	Lowest Highest			Above
	Average	Average	Differ	rence	Final	Final
	Percent	Milli	ion Metric Tol	ns	Number of	of Years 2/
WHEAT			60.0			
World	2.2	10.9	-30.7	6.8	6	4
U.S.	0.8	0.5	-1.2	0.8	5	5
Foreign	2.6	11.2	-30.9	7.5	6	4
COARSE GRAINS 3/						
World	1.1	8.5	-22.6	11.3	8	2
U.S.	2.7	5.3	-12.9	6.1	7	3
Foreign	1.4	8.0	-18.9	9.1	5	5
RICE (Milled)						
World	2.7	8.5	-24.1	3.4	9	1
U.S.	4.7	0.2	-0.4	0.3	7	3
Foreign	2.7	8.4	-24.4	3.6	9	1
SOYBEANS				4 =		
World	2.6	2.4	-4.4	4.7	4	6
U.S.	4.0	2.0	-2.7	4.6	5	5
Foreign	5.1	2.2	-3.2	4.2	4	6
		Millio	 n 480-lb. Bai	les		
COTTON						
World	3.0	2.4	-10.9	4.5	5	5
U.S.	4.5	0.6	-1.9	0.8	5	4
Foreign	3.2	2.2	-11.2	3.7	5	5
UNITED STATES		Million Bushels				
CORN	5.5	316	- 599	1,071	6	4
SORGHUM	6.1	44	-82	83	7	3
BARLEY	3.2	16	– 16	46	5	5
OATS	4.7	19	-26	57	, 4	6

^{1/} The final estimate for 1981/82-1989/90 is defined as the first November estimate following the marketing year and for 1990/91 last month's estimate.

^{2/} May not total ten if projection was the same as the final.

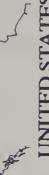
^{3/} Includes corn, sorghum, barley, oats, rye, millet, and mixed grain.

WORLD AGRICULTURAL WEATHER HIGHLIGHTS

SEPTEMBER 12, 1991

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

harvesting. Recent freezing weather had little impact on maturing crops. Mostly dry, warm weather in late August favors grain and oilseed



UNITED STATES

moisture stress while warm temperatures Winter wheat planting is underway with weather for crops prevails elsewhere. Showers across the corn belt reduce promote rapid crop development in western sections. Mostly favorable limited moisture in central Plains.

SOUTH AMERICA

In Argentina, periodic rain favors is needed for corn planting, and wheat growth. In Brazil, rain coffee and citrus flowering.

EUROPE

showers and cooler weather in Spain Favorable harvest weather prevails across the north and east. Recent and France ease crop stress. Corn is maturing.

WESTERN USSR アンアン

immature crops and increases preplanting moisture for 1992 winter grain crops. Widespread rain in August benefits

SOUTH ASIA

Favorable conditions prevail in central late Thai rice but cause flooding and for establishment of fall planted and eastern grain and oilseed areas grains and oilseeds in the northwest Moisture is limited for late planted for reproductive to filling crops. crops in the southern interior.

NEW LANDS

immature crops. The spring grain harvest Above-normal precipitation in August eases drought conditions, benefiting is off to a slow start because crops are ripening later than usual.

EASTERN ASIA

wetness in the North China Plain China and South Korea. Recent Tropical storms soak southern slows crop harvests.

SOUTHEASTASIA

Philippines but cause some flooding in Frequent, heavy showers benefit helps immature grains over the along the Mekong. Rain also northwestern rice areas.

AUSTRALIA

northern New South Wales since late Drought prevails in Queensland and reproduction in need of moisture. July. Wheat is advancing into

> (More details are available in the Weekly Weather and Crop Bulletin. Subscription information may be obtained by calling (202) 447-7917.)

WEATHER BRIEFS

SOUTHERN BRAZIL: DRYNESS BECOMING A CONCERN

Rainfall has been below normal and temperatures have been mostly above normal across central and southern Brazil from August 12 - September 11, 1991. Dry conditions have stressed winter wheat in some regions of Rio Grande do Sul and poor soil moisture has caused concern for on-going corn planting in Parana. As of September 12, citrus and coffee are entering their flowering stages and will increase their moisture needs as fruit set. Precipitation has been generally 25 - 50 percent of normal for the months of July and August and substantial rain is needed to improve conditions.

CENTRAL AMERICA: RAINS RETURN

A return to normal-to-above-normal rainfall levels occurred across Guatemala, Honduras and El Salvador during the period of August 27 to September 12. Rainfall had been less than 50 percent of normal across this region for eight weeks prior to August 27. This dry period had adverse effects on summer crops and low reservoir and river levels caused reductions in irrigation and hydroelectric generation. Precipitation was generally above normal this past Spring boosting residual soil moisture somewhat and minimizing the negative impact of the dry period on crops.

SOUTHEAST ASIA: HEAVY RAINS AND DROUGHTS

Normal-to-well-above normal rain not only ended dry conditions across summer crop growing regions of Thailand, Laos, Cambodia, and Vietnam, but caused major flooding along the Mekong River. Rainfall was very heavy during August 17 through September 12, which started with Typhoon Fred dropping as much as 240 millimeters of rain across the region.

Throughout the northern Philippines rainfall was very heavy from August 11 through September 12. Precipitation has been particularly persistent across western Luzon, where rain run-off and thick layers of ash from the Mt. Pinatubo Volcano caused severe damage to villages due to mud flows and landslides. Moderate rainfall, 20-40 millimeters, improved grain planting conditions in northeastern Luzon during the week of September 1 - 7. As of September 12, the central and southern Philippines are becoming too dry.

Rainfall has been seasonably increasing across Malaysia, Sumatra, and Borneo, as of September 12. However, showers have failed to reach the island of Java. A timely start to the rainy season, which should begin around September 15, is crucial to southern Indonesia following this season's failure of secondary rains to develop. Main-season rice planting usually begins in October.

PRODUCTION BRIEFS

SOUTH AFRICA: LAND DIVERSION SCHEME TO END IN OCTOBER

South Africa's land diversion scheme, announced in 1987, will end in October. The scheme to remove about 1 million hectares of marginal land from grain production and put it under pasture is considered by the Government of South Africa as successful since 700,000 to 800,000 hectares of land are expected to be converted by the end of next month. To date, 7,000 farmers have already converted 403,000 hectares, while another 244,000 hectares are in the process of being changed. A late rush to register land is expected as farmers divert their land to collect the \$63 per hectare subsidy. Since marginal land is taken out of production, corn will now be produced on better soils and average yields should improve.

INDONESIA: PROLONGED DRYNESS IN JAVA HURTS RICE CROP

Indonesia's second (minor season) rice crop has been damaged by dry weather in Java. Most of the fields affected by the drought are marginal land. Some are not irrigated and some are irrigated but cannot expect adequate water supplies because they are either far from a water source or supplied by small reservoirs currently operating at a fraction of their capacity. The U.S. agriculture attache in Jakarta reported that crops on some marginal land have been abandoned and other fields have been cut for fodder or opened to livestock for grazing. Milled rice production is forecast down 50,000 tons this month to 28.85 million tons. Harvested area is reduced by 100,000 hectares to 10.30 million. The dry weather is seriously depleting Java's irrigation reservoirs; recharging will be needed as farmers prepare their fields for the start of the main season crop beginning in October.

THAILAND: RICE PLANTINGS BENEFIT FROM RECENT RAIN

Heavy rains from tropical storm Fred benefited Thailand's main season rice crop. According to the U.S. agricultural attache in Bangkok, the the upper and central portions of the Northeast Region now have adequate moisture and planting is 70 percent completed. While rains during August also improved the situation in the lower Northeast Region that area remains a little dry. The Northern Region also received beneficial rains in August. There are reports of flooding the Northern Region, but damage is not believed to be significant. Rice plantings are 2-4 weeks behind normal because of earlier dryness. With the recent rains, plantings should be completed by mid-September and normal yields are expected. Infestations of brown planthopper have been seen in a couple of provinces, but no significant problems are reported.

WORLD: SUGAR PRODUCTION REVISED UPWARD

World 1991/92 centrifugal sugar production has been revised upward to 113.2 million tons (raw basis), 640,000 tons more than forecast in May 1991 (see WAP 5-91). This compares with the revised 1990/91 outturn of 112.8 million tons. Major increases for 1991/92 since the May report are: India, 800,000 tons to 13.5 million; Brazil, 600,000 tons to 8.5 million; Turkey 250,000 tons to 2.0 million; and China 200,000 to 7.0 million. Partially offsetting the increases are areas where prospects have declined since the May report: Cuba, 300,000 tons to 7.5 million; and the European Community, 365,000 tons to 16.3 million. The largest percentage change occurred in Sweden, down 28 percent (85,000 tons) since the May report.

EGYPT: PRODUCTION OF PANEL PRODUCTS INCREASING

The wood panel products industry is relatively new to Egypt, according to the U.S. agricultural counselor in Cairo. Currently, one public sector and four private sector plants manufacture plywood, blockboard, and veneer from imported logs. Production for 1991 is forecast at 31,000 cubic meters (CUM), 1,000 CUM greater than a year ago. Plywood is available in thicknesses ranging from 3 to 22 millimeters. Although Egyptian plywood is costly and of relatively poor quality, domestic production is expected to represent 13 percent of total consumption by the end of 1991.

SOUTH AFRICA: FORESTRY SITUATION

According to the U.S. agricultural attache in Pretoria, the South African forestry sector has just completed a decade of spectacular growth despite the moderate downward trend that began in 1990. Production of wood and wood products currently accounts for 2.5 percent of South Africa's gross domestic product, up from 1.2 percent in 1980.

The 1991 timber harvest is forecast at almost 17.8 million cubic meters, slightly below the 1990 cut, due to generally poor economic conditions and reduced demand from domestic and export markets. Since there are few remaining virgin forests in South Africa, commercial plantations supply the bulk of the industry's raw material requirements. Commercial plantation area is estimated at approximately 1.2 million hectares, out of a total land area of 112.3 million hectares. Afforestation ranges from 30,000 to 31,000 hectares per year.

The economic slowdown is expected to lower softwood log production marginally. However, fellings of temperate hardwood logs are trending upward—an indication that the industry's three large private processors are cutting more Eucalyptus grandis and Wattle to expand their pulp and paper operations.

Production of softwood lumber is expected to increase slightly due to brisk demand for structural lumber. A downturn in production of temperate hardwood lumber reflects the fact that South Africa's main hardwood species, Eucalyptus and Wattle, are poorly suited for sawnwood production.

Production estimates are as follows in 1,000 cubic meters:

	1989	1990	1991 1/
HARVEST	18,536	17,979	17,773
Softwood Logs	4,353	4,684	4,675
Temperate Hardwood Logs	535	506	510
Softwood Lumber	1,793	1,734	1,750
Temperate Hardwood Lumber	220	202	200

^{1/} Preliminary.

COTE D'IVOIRE: FORESTRY SITUATION

The U.S. agricultural attache in Abidjan reports that production of wood and wood products during 1991 is expected to total nearly 3.4 million cubic meters (CUM), 5 percent below the 1990 volume. Log production, currently estimated at 2.4 million CUM, is expected to decline for the second consecutive year due to severe rains that impeded logging operations, a new government auction system for export quotas designed to reduce log exports, and stagnant demand for processed products. Lumber production is forecast at 715,000 CUM, a 5-percent reduction from a year ago. Lumber output is expected to continue trending downward in line with the Government's policy of limiting expansion in the sawmilling industry in order to exploit Cote d'Ivoire's comparative advantage in the production of veneer. The plywood industry has been in decline since 1988--a reflection of dwindling availability of raw material, a shortage of spare parts, and the slow rate of plant renovation. In contrast, the veneer industry has been expanding since 1985. Production in 1991 is forecast at a record 215,000 CUM due to generous log allocations, state-the-of-art equipment, and strong external demand.

Production is estimated as follows in 1,000 cubic meters:

	<u>1987</u>	1988	<u>1989</u>	1990	1991 1/
Tropical Hardwood Logs	2,588	2,543	2,567	2,549	2,400
Tropical Hardwood Lumber	759	784	747	753	715
Tropical Hardwood Veneer	164	179	197	206	215
Tropical Hardwood Plywood	45	53	44	42	39
Total	3,556	3,559	3,555	3,550	3,369

^{1/} Preliminary.

USSR: LIVESTOCK DEVELOPMENTS IN PERSPECTIVE

Soviet meat production has been in decline since the 1989 record year, but remains above the 1987 level due in part to herd culling.

Soviet cattle inventories reached 122.1 million head on January 1, 1987; however, at the start of 1991, numbers were down to 115.7 million head. Further reductions are expected this year and next. The rate of decline appears to be increasing; in 1989, cattle numbers fell by 1 million head. In 1990 reductions exceeded 2 million head while a decline of more than 3 million head is likely this year. Average carcass weights are also down about 5 percent due to reduced feed supplies and lower slaughter ages.

There has been an even sharper decline in sheep, with numbers falling at 5 million a year since 1990, compared to less than 2 million a year from 1987 to 1990. Projected 1992 inventories are at a 25-year low.

Soviet hog numbers reached 79.5 million head at the start of 1987, fell over 2 million head during the year and then increased during 1988 and 1989. Pork production continued to expand, due to in part to higher carcass weights in 1988 and 1989. Since January 1, 1990, hog numbers have dropped more than 2 million head per year while carcass weights and pork production have declined. The reductions in Soviet inventories have been on state-owned farms while the small private sector has increased.

For the first half of 1991 procurements of all meat, including poultry, from state farms were only 88 percent of the 1990 level. This is apparently due, in part, to increased sales in private markets by both state and private farms. Private markets normally trade at significantly higher prices.

Soviet Livestock and Red Meat Production

	CATTLE	BEEF & VEAL	HOGS	PORK	SHEEP	SHEEP & GOAT MEAT
	1,000 HEAD	1,000MT	1,000 HEAD	1,000MT	1,000 HEAD	1,000MT
1987 1988 1989 1990 1991 1/ 1992 <u>2</u> /	122,103 120,592 119,580 118,400 115,700 112,000	8,288 8,600 8,800 8,814 8.500 8,300	79,500 77,403 78,143 78,409 75,583 73,000	6,324 6,600 6,700 6,646 6,250 5,950	142,210 140,783 140,684 138,400 133,300 128,300	905 1,000 1,000 1,000 950 900

Source: U.S. Agricultural Counselor, Moscow, and Official Statistics. 1/ Preliminary. 2/ Forecast.

FEATURE COMMODITY ARTICLES

WORLD RED MEAT PRODUCTION

World 1/ red meat production for 1991 is projected at 119.2 million tons, down slightly from the March forecast, and on par with estimates for 1990. Although 1991 beef, sheep, and goat meat production forecasts have been increased since the March review, the forecast for world pork production has declined over 2 percent. For 1992, red meat production is projected to increase nearly 2 percent over 1991, with pork showing the largest absolute growth.

World Red Meat Production (millions tons)

	1989	<u>1990</u>	March 1991	Sept. 1991	Forecast 1992
Beef and Veal Pork Sheep/Goat meat	48.4 63.4 6.0	48.5 64.7 6.3	47.9 66.0 6.3	48.2 64.6 6.4	49.0 66.0 6.4
Total	117.8	119.5	120.2	119.2	121.3**

** Totals may not add due to rounding.

World 1991 beef and veal production is projected at 48.2 million tons, slightly less than the record high achieved in 1990. By the end of 1991, world cattle numbers are forecast down marginally, due to the pressure of herd reductions in the Soviet Union. In 1992, beef and veal production is forecast to increase 2 percent.

Herd rebuilding in the <u>United States</u> started in 1989, continued in 1990 with a 1.3-million-head increase and a 3.3-million-head increase is expected this year. U.S. beef production for 1991 is projected up 1 percent, despite cattle slaughter being projected below 1990 levels due to a 10 pound rise in average carcass weight. For 1992, U.S. beef production is forecast to rise another 1 percent due to high carcass weights, plus an increase in slaughter numbers.

In <u>Mexico</u>, improved rainfall this year has permitted some herd growth, compared to the drought-induced herd culling of 6 percent in 1990. Beef production for 1991 is projected down 13 percent. Mexican beef production in 1992 is projected to be slightly above 1991.

Increased slaughter has pushed <u>Argentina's</u> beef production for 1991 up to equal the 1990 output. However, the trend is forecast to reverse in 1992 with lighter carcass weights and lower slaughter reducing production by 2 percent. Argentine cattle numbers have stabilized at 50 million head. Increased taxes and domestic prices that were 30 percent lower in the first half of 1991 stifled most of the potential increase due to recent favorable weather.

1/ Beef, veal, pork, and sheep and goat meat production in selected countries.

EC beef production is projected to be up less than 1 percent this year, but it is forecast to fall slightly in 1992. Cattle numbers were down 1 percent in 1990 and a decline of 2 percent is expected in 1991. Total EC production is being affected by the 33-percent cut in the eastern German states' cattle herd as non-profitable operations are terminated. Surplus beef stocks remain high and current EC cattle prices are between 5 and 10 percent below last year's depressed levels.

In the <u>Soviet Union</u>, feed shortages have caused heavy herd culling in the socialized sector. Despite an increase in cattle slaughter, 1991 beef production is projected down 3 percent because of lower carcass weights. This trend of herd culling and lower beef production is expected to continue next year.

Australian cattle herds are expected to increase 2 percent during 1991 after a slight increase in 1990. Despite decreased competition from sheep and grain production, farmers lack the capital to expand herds to the extent they wish. Beef production is projected down 4 percent in 1991 due to reduced slaughter. Drought-induced culling in 1990 caused slaughter to increase by 9 percent.

<u>World</u> pork production is estimated at 64.6 million tons for 1991, virtually unchanged from 1990. Pork production in 1992 is forecast to increase 1.4 million tons. World hog numbers are expected to increase slightly this year following a similar gain in 1990. <u>U.S.</u> pork production for 1991 is estimated up 4 percent due to increased slaughter and carcass weights. A further 4-percent rise in production is forecast for 1992.

Mexican pork production for 1991 is projected up 3 percent, with an additional slight increase forecast in 1992.

EC pork production is projected to fall 4 percent in 1991 and remain at that level in 1992. This decline is concentrated in the eastern states of Germany, where a drastic reduction in hog numbers of almost 50 percent is occurring as part of the restructuring of the unprofitable and environmentally damaging socialist agricultural sector.

In <u>Hungary</u>, pork production is expected to continue to decline because of a weak domestic market, the collapse of the Soviet market, and reduced export subsidies. In <u>Czechoslovakia</u>, all meat production has declined due economic disruption in the conversion to a less regulated economic system. However, price changes now favor pork, which declined only 5 percent, over beef, which fell almost 14 percent. Depressed grain and potatoes prices have stimulated a 13-percent rise in pork production in <u>Poland</u> this year, but falling pork prices are expected to slow output growth next year.

Soviet hog numbers fell 4 percent during 1990 and a similar rate of decline is expected this year due to feed shortages. Virtually all losses occurred in the socalized sector. The reinvigorated private sector is growing, but at one-fifth of total production, does not counter the overall downward trend. Pork production is forecast down 6 percent this year and 5 percent next year.

Chinese pork production is projected up 2 percent for 1991, compared to a nearly 5 percent increase in 1990. Floods this year damaged the feed supply system, destroyed feed stocks and storage buildings, and drowned some hogs. Pork production in 1992 is forecast to increase 5 percent.

High levels of pork production are expected to continue in <u>Taiwan</u> for both 1991 and 1992, supported by strong demand from Japan.

World sheep and goat meat production in 1991 is estimated at 6.4 million tons, up 2 percent from last year. Production is forecast to fall slightly in 1992. World sheep numbers (excluding China) are expected to fall 4 percent during the current year, following a 2-percent drop in 1990. Most of the 1991 growth in meat production is due to higher slaughter in China and Australia.

Australian production is estimated up 8 percent because of continued heavy sheep slaughter in response to falling wool prices. As a result, Australian inventory numbers are expected to drop 11 percent during 1991. Sheep meat production in 1992 is expected to be down only slightly as low wool prices are expected to discourage sheep herd growth.

In <u>China</u>, sheep meat production is projected up 8 percent in 1991, with a further increase of 4 percent forecast for 1992. The expansion in both sheep meat and beef production in China is believed to be due to better management by livestock-producing households.

Sharp declines are reported in <u>Soviet</u> sheep numbers with sheep and goat meat production falling 5 percent this year and next, to a 25-year low.

New Zealand's sheep numbers were down 4 percent on June 30, 1991 (the start of the marketing year) and are forecast to fall slightly next year. Weak wool and lamb prices are major reasons for the reduction in inventories. Sheep meat production for 1991 is projected down slightly from last year and is expected to continue at that level into 1992.

Arthur Hausamann (202) 382-8883.

TABLE 10

RED MEAT PRODUCTION, SELECTED COUNTRIES 1/
(1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

	1989	1990	1991	Forecast 1992
Canada	2,164	2,058	2,024	2,120
Mexico	3,125	2,658	2,448	2,460
United States	17,963	17,594	17,997	18,399
NORTH AMERICA	23,252	22,310	22,469	22,979
Costa Rica Dominican Republic El Salvador Guatemala Honduras CENTRAL AMERICA & CARIB.	81	85	91	90
	74	64	66	69
	27	27	28	30
	75	73	67	66
	24	23	22	22
	281	272	274	277
Argentina Brazil Colombia Peru Uruguay Venezuela SOUTH AMERICA	2,696	2,738	2,725	2,667
	4,750	4,450	4,700	5,400
	881	936	960	971
	112	116	104	100
	376	349	280	285
	469	481	471	467
	9,284	9,070	9,240	9,890
Belgium/Luxembourg Denmark France Germany Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	2,326		2,530 2,364	382 2,530 2,404
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PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

SEPTEMBER 1991

TABLE 10 (Continued)

RED MEAT PRODUCTION, SELECTED COUNTRIES 1/
(1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

	1989	1990	1991	Forecast 1992
Austria Finland Sweden Switzerland OTHER WEST EUROPE	617 280 447 437 1,781	629 303 438 434 1,804	635 302 424 430 1,791	627 290 415 435 1,767
Bulgaria Czechoslovakia Hungary Poland Romania Yugoslavia EAST EUROPE	638 1,458 1,191 2,621 882 1,169 7,959	636 1,406 1,093 2,736 902 1,218 7,991	596 1,295 1,004 2,868 906 1,150 7,819	1,294 825 2,892 881 1,160
U.S.S.R.	16,500	16,460	15,700	15,150
Israel Saudi Arabia Turkey MIDDLE EAST	39 25 645 709	40 28 680 748	38 30 695 763	37 40 710 787
Egypt South Africa AFRICA	464 784 1,248	489 899 1,388	502 914 1,416	508 927 1,435
China Hong Kong India Korea, South Japan Philippines Singapore Taiwan ASIA	30 2,407 610 2,142 747 75	797 76 1,014	20 2,380 601 2,060 819 77 1,025	19 2,468 626 2,080 841 79 1,025
Australia			2,663	
New Zealand OCEANIA	1,168	1,022	1,070 3,733	1,065
TOTAL	117,773	119,466	119,196	121,317

^{1/} Includes Beef, Veal, Pork and Goat meat.

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA SEPTEMBER 1991

TABLE 11

BEEF AND VEAL PRODUCTION, SELECTED COUNTRIES (1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

	1989	1990	1991	Forecast 1992
Canada	980	924		915
Mexico	2,140	1,790		1,555
United States	10,633	10,464		10,689
NORTH AMERICA	13,753	13,178		13,159
Costa Rica Dominican Republic El Salvador Guatemala Honduras CENTRAL AMERICA & CARIB.	81	85	91	90
	60	51	52	54
	27	27	28	30
	61	59	53	52
	24	23	22	22
	253	245	246	248
Argentina Brazil Colombia Peru Uruguay Venezuela SOUTH AMERICA	2,600	2,650	2,640	2,580
	3,800	3,400	3,600	4,250
	741	795	823	839
	112	116	104	100
	376	349	280	285
	337	382	370	362
	7,966	7,692	7,817	8,416
Belgium/Luxembourg Denmark France Germany Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	312	323	329	332
	205	202	210	207
	1,670	1,753	1,800	1,850
	1,963	2,112	2,080	1,950
	82	82	80	76
	432	486	535	564
	1,140	1,165	1,165	1,165
	485	521	530	540
	120	112	111	110
	451	513	502	480
	980	1,003	1,004	1,034
	7,840	8,272	8,346	8,308

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

SEPTEMBER 1991

TABLE 11 (Continued)

BEEF AND VEAL PRODUCTION, SELECTED COUNTRIES (1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

	1989	1990	1991	Forecast 1992
Austria Finland Sweden Switzerland OTHER WEST EUROPE	213 107 139 157 616	223 117 145 164 649	230 118 149 165 662	222 108 146 167 643
Bulgaria Czechoslovakia Hungary Poland Romania Yugoslavia EAST EUROPE	136 488 108 729 210 309 1,980	137 454 110 838 212 352 2,103	126 391 111 714 230 300 1,872	126 390 100 690 230 303 1,839
U.S.S.R.	8,800	8,814	8,500	8,300
Israel Saudi Arabia Turkey MIDDLE EAST	39 25 270 334	40 28 310 378	38 30 330 398	37 40 350 427
Egypt South Africa AFRICA	386 582 968	408 661 1,069	420 678 1,098	425 691 1,116
China India Korea, South Japan Philippines Taiwan ASIA	1,072 1,847 124 548 132 6 3,729	549 132 5	570	1,610 1,883 135 575 131 5 4,339
Australia New Zealand OCEANIA	550	470	1,640 526 2,166	521
TOTAL	48,354	48,529	48,176	48,961
PRODUCTION ESTIMATES AND	CROP ASSESS	MENT DIVIS	STON FAS	IISDA

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA
SEPTEMBER 1991

TABLE 12

PORK PRODUCTION, SELECTED COUNTRIES

(1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

FORECAST FORECAST 1989 1990 1991 1992
 1,184
 1,134
 1,134
 1,205

 910
 792
 820
 825

 7,173
 6,965
 7,267
 7,543

 9,267
 8,891
 9,221
 9,573
 Canada Mexico United States NORTH AMERICA Brazil 950 1,050 1,100 1,150
Colombia 140 141 137 132
Dominican Rep. 14 13 14 15
Guatemala 14 14 14 14
Venezuela 132 99 101 105
CENTRAL AND SOUTH AMERICA 1,250 1,317 1,366 1,416 Belgium/Luxembourg 831 770 876 847
Denmark 1,165 1,207 1,260 1,270
France 1,840 1,870 1,890 1,900
Germany 4,001 3,949 3,250 3,200
Greece 151 147 151 152
Ireland 144 157 162 168
Italy 1,295 1,333 1,330 1,330
Netherlands 1,636 1,661 1,630 1,650
Portugal 216 243 244
Spain 1,722 1,788 1,780 1,800
United Kingdom 978 962 982 996
EUROPEAN COMMUNITY 13,979 14,087 13,555 13,557 _____

 Austria
 404
 406
 405
 405

 Finland
 173
 186
 184
 182

 Sweden
 308
 293
 275
 269

 Switzerland
 280
 270
 265
 268

 OTHER WEST EUROPE
 1,165
 1,155
 1,129
 1,124

 424
 422
 400
 420

 960
 942
 894
 894

 1,079
 970
 893
 725

 1,870
 1,870
 2,122
 2,185

 600
 620
 600
 575

 791
 799
 785
 790

 5,724
 5,623
 5,694
 5,589

 Bulgaria Czechoslovakia Hungary Poland Romania Yugoslavia EAST EUROPE _____ 6,700 6,646 6,250 5,950 21,228 22,811 23,300 24,600 30 20 20 19 485 440 470 490 1,594 1,555 1,490 1,505 615 665 690 710 75 76 77 79 917 1,009 1,020 1,020 24,944 26,576 27,067 28,423 China Hong Kong Korea, South Japan Philippines Singapore Taiwan SIA
 302
 319
 325
 335

 44
 43
 42
 41

 346
 362
 367
 376
 Australia New Zealand OCEANIA 63,375 64,657 64,649 66,008 ______

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

TABLE 13

LAMB, MUTTON, GOAT MEAT PRODUCTION, SELECTED COUNTRIES (1,000 METRIC TONS CARCASS-WEIGHT-EQUIVALENT)

(1,000 MEIRIC TONS	VS CARCASS-WEIGHT-EQUIVABLINI			
	1989	1990	1991	FORECAST 1992
Mexico	75	76	78	80
United States	157	165	164	167
NORTH AMERICA	232	241	242	247
ARGENTINA	96	88	85	87
Belgium/Luxembourg Denmark France Germany Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	7	7	6	6
	2	2	2	2
	160	193	190	190
	42	50	50	48
	130	130	126	127
	63	85	95	97
	80	85	87	89
	13	16	18	18
	28	28	28	28
	231	236	248	250
	368	371	378	374
	1,124	1,203	1,228	1,229
Bulgaria	78	77	70	70
Czechoslovakia	10	10	10	10
Hungary	4	4	4	4
Poland	22	28	32	17
Romania	72	70	76	76
Yugoslavia	69	67	65	67
EAST EUROPE	255	256	257	244
U.S.S.R.	1,000	1,000	950	900
Egypt South Africa AFRICA	78	81	82	83
	202	238	236	236
	280	319	318	319
China	962	1,068	1,150	1,200
India	560	570	579	585
Korea, South	1	1	1	1
Turkey	375	370	365	360
MIDDLE EAST & ASIA	1,898	2,009	2,095	2,146
Australia New Zealand OCEANIA	585	646	698	677
	574	509	502	503
	1,159	1,155	1,200	1,180
TOTAL	6,044	6,271	6,375	6,352

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

SEPTEMBER 1991

CATTLE AND BUFFALO INVENTORIES, SELECTED COUNTRIES (1,000 HEAD JANUARY 1)

TABLE 14

	1989	1990	1991	Forecast 1992
Canada	11,016	11,147	11,198	11,400
Mexico	34,999	31,747	29,847	29,887
United States	98,065	98,162	99,436	102,690
NORTH AMERICA	144,080	141,056	140,481	143,977
Costa Rica Dominican Republic El Salvador Guatemala Honduras CENTRAL AMERICA & CARIB.	1,735	1,762	1,762	1,741
	1,990	1,986	1,977	1,976
	1,162	1,220	1,242	1,285
	2,100	1,900	1,695	1,532
	2,457	2,424	2,388	2,356
	9,444	9,292	9,064	8,890
Argentina Brazil Colombia Peru Uruguay Venezuela SOUTH AMERICA	50,782	50,582	50,080	50,079
	130,500	130,850	131,275	130,700
	17,627	16,835	16,225	16,145
	4,000	3,800	3,630	3,510
	10,548	9,377	9,431	10,058
	13,095	13,210	13,368	13,648
	226,552	224,654	224,009	224,140
Belgium/Luxembourg Denmark France Germany Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	3,174 2,226 20,120 20,369 723 5,637 8,843 4,606 1,359 5,200 11,902 84,159		5,126 11,845	

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

SEPTEMBER 1991

CATTLE AND BUFFALO INVENTORIES, SELECTED COUNTRIES (1,000 HEAD JANUARY 1)

TABLE 14 (Continued)

	1989	1990	1991	Forecast 1992
Austria Finland Sweden Switzerland OTHER WEST EUROPE	2,541 1,379 1,676 1,850 7,446	2,562 1,363 1,697 1,855 7,477	2,584 1,315 1,660 1,829 7,388	2,513 1,292 1,612 1,827 7,244
Bulgaria Czechoslovakia Hungary Poland Romania Yugoslavia EAST EUROPE	1,615 5,075 1,690 10,322 6,416 4,759 29,877	1,577 5,129 1,598 10,143 6,283 4,705 29,435	1,524 4,923 1,571 9,024 5,952 4,527 27,521	1,512 4,838 1,500 8,600 5,754 4,600 26,804
U.S.S.R.	119,580	118,400	115,700	112,000
Israel Saudi Arabia Turkey MIDDLE EAST	191 217 13,400 13,808	190 191 12,700 13,081	186 176 12,200 12,562	184 158 11,700 12,042
Egypt South Africa AFRICA	6,331 12,675 19,006	6,385 13,398 19,783	6,408 13,512 19,920	6,418 13,585 20,003
China India Korea, South Japan Philippines Taiwan ASIA	97,950 267,620 2,039 4,682 4,524 176 376,991	4,760 4,395 165	272,710 2,125 4,863 4,387 154	4,878 4,375 158
Australia New Zealand OCEANIA	23,938 8,058 31,996	•	•	24,800 8,235 33,035
TOTAL	1,062,939	1,062,023	1,061,616	1,061,494

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

SEPTEMBER 1991

TABLE 15

HOG INVENTORIES, SELECTED COUNTRIES (1,000 HEAD JANUARY 1)

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		- /	FORECAST
	1989	1990	1991	1992
Canada Mexico	11,018 9,003	10,737 8,563	10,608	10,780 9,193
United States NORTH AMERICA	55,469	53,852	54,462	58,000
	75,490	73,152	73,663	77,973
Brazil Colombia Dominican Rep. Guatemala	31,700	33,200	32,500	33,100
	2,393	2,434	2,398	2,369
	293	306	306	305
Venezuela CENTRAL AND SOUTH AMERICA	1,110	1,100	1,110	1,115
	2,961	2,326	1,971	1,802
	38,457	39,366	38,285	38,691
Belgium/Luxembourg Denmark France Germany Greece Ireland Italy Netherlands Portugal	6,306	6,510	6,341	6,421
	9,105	9,120	9,282	9,500
	11,866	11,860	11,860	11,560
	35,235	34,178	30,818	28,868
	1,114	1,100	1,141	1,150
	961	999	1,069	1,099
	9,360	9,261	9,119	9,050
	13,820	13,638	13,788	13,600
	2,326	2,531	2,663	2,834
Spain United Kingdom EUROPEAN COMMUNITY	16,100	16,910	16,001	16,200
	7,626	7,383	7,379	7,423
	113,819	113,490	109,461	107,705
Austria Finland Sweden Switzerland OTHER WEST EUROPE	3,874	3,773	3,688	3,600
	1,327	1,348	1,290	1,231
	2,264	2,264	2,170	2,143
	1,869	1,787	1,723	1,678
	9,334	9,172	8,871	8,652
Bulgaria Czechoslovakia Hungary Poland Romania Yugoslavia EAST EUROPE	4,132	4,352	4,340	4,390
	7,348	7,498	7,090	6,800
	8,327	7,660	8,000	7,400
	19,605	18,685	19,739	21,500
	14,350	11,659	13,929	15,000
	7,396	7,231	7,358	7,360
	61,158	57,085	60,456	62,450
U.S.S.R.	78,143	78,409	75,583	73,000
China Korea, South Japan Philippines Taiwan ASIA	342,220	352,810	362,410	365,000
	4,852	4,801	4,528	4,558
	11,866	11,816	11,335	11,500
	7,909	8,124	8,007	8,150
	6,954	7,783	8,565	8,500
	373,801	385,334	394,845	397,708
Australia New Zealand OCEANIA	2,766	2,765	1,881	1,076
	414	380	395	405
	3,180	3,145	2,276	1,481
TOTAL	753,382	759,153	763,440	767,660
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PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA

TABLE 16

SHEEP INVENTORIES, SELECTED COUNTRIES (1,000 HEAD JANUARY 1)

	(I,000 REAL	DANOARI	1 /	
	1989	1990	1991	FORECAST 1992
United States	10,858	11,363	11,200	10,900
Argentina	29,345	28,571	27,552	26,506
Belgium/Luxembourg Denmark France Germany Greece Ireland Italy Netherlands Portugal Spain United Kingdom EUROPEAN COMMUNITY	156 86 11,500 4,098 10,694 4,991 11,623 1,405 3,187 23,797 29,045 100,582	158 100 11,500 4,136 10,150 5,782 11,695 1,702 3,347 25,447 29,521 103,538	163 111 11,500 3,239 9,759 6,001 11,575 1,800 3,413 24,037 29,776 101,374	163 125 11,595 2,879 9,694 6,236 11,594 1,810 3,543 25,000 29,925 102,564
Bulgaria Czechoslovakia Hungary Poland Romania Yugoslavia EAST EUROPE	8,593 1,047 2,216 4,300 16,210 7,564 39,930	7,988 1,051 2,069 4,196 15,442 7,596 38,342	7,309 1,087 1,865 3,798 15,038 7,431 36,528	7,241 1,087 1,723 3,200 14,830 7,500 35,581
U.S.S.R.	140,684	138,400	133,300	128,300
Egypt South Africa AFRICA	3,451 30,935 34,386	3,534 32,665 36,199	3,554 32,580 36,134	3,439 32,500 35,939
India Turkey MIDDLE EAST & ASIA	46,216 45,700 91,916	47,277 45,300 92,577	48,248 45,000 93,248	48,178 44,600 92,778
Australia New Zealand OCEANIA	171,292 64,600 235,892	177,841 60,569 238,410	175,570 57,853 233,423	157,900 57,786 215,686
TOTAL	683,593	687,400	672,759	648,254
China *	201,530	211,600	211,642	205,700
TOTAL	885,123	899,000	884,401	853,954
* Includes Goats In China				

^{*} Includes Goats In China.

PRODUCTION ESTIMATES AND CROP ASSESSMENT DIVISION, FAS, USDA SEPTEMBER 1991

WORLD ALMOND PRODUCTION

World commercial almond production during the 1991/92 season is forecast at 316,900 tons (shelled basis), 23 percent below last year's record of 412,900 tons. Crops in the United States, Greece, and Italy are expected to be substantially smaller than a year ago primarily due to adverse weather conditions during the growing season. Preliminary assessments indicate production will return to a more normal level in both Portugal and Spain. Record crops are forecast for Morocco and Turkey.

Almond production in the United States is forecast at 208,700 tons, 30 percent below the 1990/91 volume, and potentially the smallest U.S. crop since 1986. The decline reflects a combination of factors. Bearing acreage during the 1991/92 season is expected to drop to 409,000 acres, 2,000 acres less than last year. March rains eased the drought situation but resulted in widespread flower loss, particularly among the late blooming varieties. Cool weather in April caused a higher-than-normal nut drop and delayed maturity by 7-10 days. However, the cooler temperatures also dampened the impact of the water shortage and prevented serious disease and insect problems.

Almond production in Greece is expected to decline for the third consecutive year. The 1991/92 harvest is currently estimated at 11,000 tons, down 29 percent from a year ago due to inclement weather, declining area, and low producer prices. The most significant factor contributing to the decline was excessive rainfall during the blossoming stage that sharply reduced output in the two, main growing areas, Thessaly and Macedonia. Very low producer prices, coupled with parallel increases in production costs, further dampened growers' interest in almond cultivation this season. During the past few years, planted area has declined at an annual rate of 2 to 5 percent. New plantings have been minimal except for limited replacement of old trees with the new, more productive Feragnes variety. Given the current downward trend in the industry, the Government's target of an annual production volume of approximately 13-14,000 tons appears unrealistic.

Italy's 1991/92 almond crop is projected at 11,000 tons, 42 percent less than a year ago and potentially the third smallest harvest in the last 5 decades. Heavy spring rains and below normal temperatures inhibited pollination, adversely affected crop maturation, and delayed harvesting 2 to 3 weeks. However, kernel sizes are reportedly above average and of generally good quality. The long-term outlook for the Italian almond industry is bleak. Production has declined significantly during the last 25 years and uprootings continue unabated. Growers in Apulia and Sicily, the two largest growing areas, are gradually limiting almond production to only the most marginal, hilly, non-irrigated land. The more productive areas are now being planted to vegetables, table grapes, and citrus.

Spain's annual production of almonds is primarily determined by weather factors. A combination of rain, fog, and frosts during pollination and blooming resulted in a moderately poor set this season. However, preliminary assessments indicate the 1991/92 crop will total a respectable 55,000 tons, 10 percent larger than the 1990/91 harvest, but significantly below Spains's production potential of 80,000 tons. Quality and kernel size are reportedly good. Spain's almond area appears to have stabilized at 648,000 hectares, of which approximately 600,000 hectares are bearing and 60-70,000 are irrigated.

Orchards uprooted in marginal producing areas in the Levant have been balanced by new production areas in Murcia, Andalusia, and Aragon where farmers are experimenting with high-yield, frost-resistent varieties, modern farming techniques, and minimal irrigation use. Cultural practices, pest and disease control measures, and storage facilities have also improved in recent years despite rising production costs, labor shortages, and, until this season, low producer prices.

Almond production in Portugal is expected to rebound to 3,000 tons during the 1991/92 season, a 20-percent increase over last year. Crop quality is reportedly good, but below average rainfall stunted kernel sizes. Planted area appears stable at 42,000 hectares due, in large part, to a gradual orchard relocation process. Orchards in the traditional production centers in Tras-os-Montes and the southern Algarve are increasingly being replanted with citrus or olives, or zoned for construction. At the same time, new production areas are being opened and, thus far, have proven to be viable sites for modern industrial-scale plantations. Until recently, the almond industry was regarded as a sector in decline due to its numerous production problems. However, the long-term viability of the industry is expected to improve given the emergence of structured production zones, a shift to late flowering, high-yielding, disease resistant varieties, and new incentives and support measures activated by Portugal's acceptance of the 10-year, 2-stage EC-Accession regime.

Almond production in Turkey and Morocco has been trending upward for the past four years. Turkey is expected to harvest a record crop of 16,000 tons, up 7 percent from 1990/91 due to generally favorable growing conditions and a small increase in the number of bearing trees.

Current projections indicate Morocco's 1991/92 almond crop will total a record 12,200 tons, up 6 percent from a year ago due to optimum growing conditions, an increase in harvested area, and improved cultivation methods. The Ministry of Agriculture currently administers several programs designed to improve and expand almond area and production. The mainstay of these programs is the technical assistance and extension services provided to growers free of charge. A planting program, under the auspices of the Ministry of Agriculture and the Ministry of Interior, has boosted the total number of trees to an all-time high of 17.6 million, of which a record 13.4 million are bearing. The beneficial impact of these programs is evidenced not only by the steady growth in planted area, bearing tree numbers, and production, but by the growing number of intensive farms, the adoption of new, improved varieties, higher producer prices, and rising domestic demand.

TABLE 17. WORLD ALMOND PRODUCTION
(1,000 Metric Tons - Shelled Basis)

	1987/88	1988/89	1989/90	1990/91	1991/92 1/
Greece	8.5	19.0	17.2	15.5	11.0
Italy	12.0	14.0	18.0	19.0	11.0
Morocco	6.3	7.4	11.1	11.5	12.2
Portugal	2.7	0.9	3.5	2.5	3.0
Spain	65.0	40.0	80.0	50.0	55.0
Turkey	10.0	14.0	15.0	15.0	16.0
United States	299.4	267.6	222.3	299.4	208.7
Total	403.9	362.9	367.1	412.9	316.9

^{1/} Preliminary.

WORLD FILBERT PRODUCTION

Preliminary assessments indicate that record 1991/92 harvests in Italy and the United States will more than offset moderate production declines in Turkey and Spain. Combined output is currently forecast at 530,600 tons (inshell basis), 5 percent greater than a year ago.

Filbert production in Italy is forecast at a record 140,000 tons, 75 percent larger than the exceptionally poor outturn in 1990/91. Growing conditions were generally favorable despite heavy spring rains that delayed harvesting operations for 2 to 3 weeks.

The 1991/92 U.S. filbert crop is expected to reach an all-time high of 23,600 tons, up 20 percent from last year, and 6 percent above the previous record of 22,300 tons set during the 1985/86 season. The spring of 1991 was cooler and wetter than normal which delayed maturation of the crop by 7 to 10 days. Crop quality and kernel size were not affected and are reportedly above average.

Turkey, the world's leading commercial filbert producer, is expected to harvest a 1991/92 crop of 350,000 tons, a 10 percent reduction from last year, and significantly below the record 1989/90 output. With only marginal increases in planted area and bearing tree numbers, Turkey's annual crop is determined mainly by seasonal growing conditions. The 1991/92 season was unusually wet, particularly during the blossoming stage. Pollination was inhibited, resulting in a poor fruit set throughout the central Black Sea region. Better-than-average yields in the western growing areas partially compensated for the decline.

For the second consecutive year, drought plagued Spain's major filbert growing areas. As a result, the 1991/92 filbert crop is expected to decline 6 percent to a 7-year low of 17,000 tons. Crop quality reportedly ranges from fair to slightly below average. Rising production costs and low producer prices are discouraging many Spanish producers from using appropriate cultivation techniques and many orchards are showing signs of deterioration. Yields are already declining because of the persistent drought and poor orchard maintenance will probably result in further reductions. This would be unfortunate since, until recently, Spain's yields compared favorably to those in competing countries.

TABLE 18. FILBERT PRODUCTION (1,000 Metric Tons - Inshell Basis)

	1987/88	1988/89	1989/90	1990/91	1991/92 1/
Italy Spain Turkey United States	90.0 32.0 280.0 19.8	140.0 17.5 410.0 15.0	140.0 25.0 500.0 11.8	80.0 18.0 390.0 19.7	140.0 17.0 350.0 23.6
Total	421.8	582.5	676.8	507.7	530.6

1/ Preliminary.

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ASIAN FORESTRY SITUATION

CHINA: Roundwood production has been trending downward since 1988 due to declining domestic demand, the gradual depletion of large diameter logs, and the Government's continuing restrictions on the use of wood for construction. The 1991 harvest is forecast at 105.5 million cubic meters (CUM), down 4 percent from a year ago, and 18 percent below the record 1988 cut of 128.0 million CUM. China's eighth 5-year plan (1991-1995) calls for the expansion, protection, and more efficient utilization of domestic forestry resources. Expansion plans by the Ministry of Forestry (MOF) envision 4 to 5 million hectares of plantings per year. Assuming an 80-percent survival rate, the MOF projects that forested area will increase from 13 percent of China's total land area, or 124.7 million hectares, to 16 percent of total land area by the year To date, the bulk of these plantings have been fast-growing species that will quickly rebuild the forest base and provide a rapid return on investment. Protection measures include stricter efforts to enforce the annual cutting quota, and greater emphasis on large scale afforestation projects that serve as shelterbelts as well as future timber resources. To ensure efficient utilization of its remaining, commercially viable resources, the Government is committed to eliminating all non-essential uses of wood. Current policy requires substitution with products such as steel, iron, or plastic whenever possible.

Constraints caused by Government harvesting limitations, declining stocks of commercially usable logs, and increasing labor costs are expected to reduce China's 1991 output of softwood and temperate hardwood logs and lumber. Total lumber production remains limited by domestic milling capacity, and Government policies favoring the upgrade and expansion of integrated processing facilities for panel products. Plywood production continues to expand, although the emphasis has shifted to upgrading quality rather than expanding production capacity. The production of artificial board products, particularly medium density fiberboard, oriented strand board and particleboard, is one area that represents an ideal opportunity for the industry to improve wood utilization. Chinese board products are manufactured primarily from wood residues rather than wood chipped explicitly for that purpose. The MOF estimates that the equivalent of 13 million CUM of wood have been saved by the introduction of new technologies and state-of-the-art manufacturing lines that use wood waste to produce high quality board products. The MOF target is to increase production of all panel products by 15 percent annually. Output of panel products during 1991 is expected to exceed 2.7 million CUM, slightly above the 1990 volume, but well below the 15 percent target.

TABLE 19. CHINA FORESTRY PRODUCTION (1,000 Cubic Meters)

	1989	<u>1990</u>	1991 1/
HARVEST	119,080	109,500	105,500
Softwood Logs	73,850	67,890	65,500
Temperate Hardwood Logs	45,230	41,610	40,000
Softwood Lumber	18,290	17,650	17,030
Temperate Hardwood Lumber	9,850	10,819	10,400
Railroad Ties/Sleepers	1,200	1,300	1,400
Softwood Plywood	580	590	600
Temperate Hardwood Plywood	145	145	150
Fiberboard	1,443	1,494	1,500
Particleboard	442	458	460

^{1/} Preliminary.

INDONESIA: Heightened international concern over depletion of the world's tropical rain forests, coupled with the economic necessity of ensuring a sustainable supply of raw material for its own downstream wood products industries, has prompted the Indonesian Government to implement policies designed to effectively manage and protect its forest resources. Estimates of the rate of deforestation vary, but Indonesia appears to be losing approximately 1.0 million hectares of forest each year through the combined effects of logging, expansion of agricultural areas, and conversion of land for other development projects. The Government's commitment to arrest the depletion of its timber base, and improve forest management techniques, is being accomplished through reforestation programs, implementation of a selective felling system, Government incentives for planting timber estates, closer supervision of concession holders' activities, and stricter enforcement of the U.S.\$10.00 per cubic meter reforestation tax.

In an effort to manage log production, the Department of Forestry has set a maximum allowable cut of 32 million CUM per year, well below the industry's annual logging capacity of 48 million CUM. Hardwood log production for 1991 is forecast at 26.5 million CUM, slightly below the 1990 harvest, but 17 percent smaller than the allowable cut, due to the reforestation tax, higher export taxes on sawn timber, a ban on new concession licenses, and stricter enforcement of concession regulations.

Indonesia's milling capacity is approximately 18.4 million CUM. Production of hardwood lumber during 1991 is forecast at 8.4 million CUM, down 7 percent from a year ago, and significantly below the industry's installed capacity. Tighter log supplies and an export tax on sawn timber have been instrumental in changing the composition of log use between sawmill and plywood plants. Now, nearly 70 percent of Indonesia's annual log harvest is consumed by the plywood industry. During 1991, plywood production is expected to total 9.6 million CUM, an impressive volume compared to the 279,000 CUM produced in 1977. Current assessments indicate steady, but slower growth in the plywood industry over the next several years given the harvesting cap and the present moratorium on start-ups of new plywood plants.

Particleboard production is forecast to increase for the second consecutive year to 320,000 CUM. Currently, there are 7 particleboard mills with a combined production capacity of 400,000 CUM per year, competing for waste products from the plywood and sawmill industries. Future output is expected to be tempered by static production of wood chips and slack domestic demand resulting from high commercial interest rates.

TABLE 20. INDONESIA FORESTRY PRODUCTION (1,000 Cubic Meters)

	1989	1990	1991 1/
Tropical Hardwood Logs	28,000	27,000	26,500
Tropical Hardwood Lumber	10,371	9,000	8,400
Railroad Ties/Sleepers	18	15	15
Tropical Hardwood Plywood	8,784	9,250	9,600
Tropical Hardwood Veneer	31	44	60
Particleboard	300	310	320

^{1/} Preliminary.

JAPAN: There are approximately 24.6 million hectares of forest land in Japan encompassing a growing stock of nearly 3.0 billion CUM. Total forest area has remained relatively stable over the past 30 years, but there has been a marked increase in area devoted to plantation forests vis-a-vis natural growth forests. Japanese forestry enterprises are small and generally operate under consignment from forest owners, the majority of which cut less than 1,000 CUM per year. For the past decade, Japan's forest owners increasingly have faced financial difficulties due to poor productivity, low stumpage prices, de-population of forest areas, and an aging workforce.

Production of softwood and temperate hardwood logs has been trending downward since 1988 primarily due to a steady rise in labor costs associated with harvesting domestic logs. The decline in temperate hardwood logs has been more pronounced because of raw material shortages, escalating prices for Hokkaido hardwoods, and quality characteristics that make Japan's hardwood species better suited for chip and pulp production rather than more profitable products like lumber or plywood.

Total sawnwood production for 1991 is forecast at 28.6 million CUM, down 4 percent from the 1990 volume of 29.8 million CUM. The reduction in mill output reflects the declining availability of domestic and imported logs, a slowdown in housing starts, and weak demand from the furniture industry.

The panel products industry is the only processing sector expected to record modest gains during 1991. To supplement declining production of temperate and tropical hardwood veneers, manufacturers began increasing output of softwood veneer in 1987. Production of softwood veneer sheets during 1991 is forecast at a record 220,000 CUM, up 14 percent from a year ago. For the past several years, domestic plywood manufacturers have devoted more processing capacity to the production of softwood plywood. Reportedly, the industry target is to increase the production share of softwood plywood to 30 percent of total domestic plywood production over the next five years, with a further increase to 50 percent by the year 2002. More moderate gains are projected for board products. Current assessments indicate expansion will be concentrated in the particleboard and medium density fiberboard sectors.

TABLE 21. JAPAN FORESTRY PRODUCTION (1,000 Cubic Meters)

	<u>1989</u>	1990	1991 1/
HARVEST	30,515	29,300	30,000
Softwood Logs	17,175	16,775	16,500
Temperate Hardwood Logs	2,446	2,219	2,100
Poles/Piles/Posts/Pitprops	403	368	350
Softwood Lumber	27,067	26,551	25,500
Temperate Hardwood Lumber	1,524	1,365	1,300
Tropical Hardwood Lumber	1,890	1,865	1,800
Softwood Veneer	170	193	220
Temperate Hardwood Veneer	199	178	160
Tropical Hardwood Veneer	7,307	6,924	6,500
Softwood Plywood	195	216	230
Temperate Hardwood Plywood	234	219	210
Tropical Hardwood Plywood	6,277	6,304	5,800
Hardboard	150	145	140
Medium Density Fiberboard	237	264	275
Insulation Board	518	528	525
Particleboard	1,092	1,072	1,080

^{1/} Preliminary.

REPUBLIC OF KOREA: Despite what is widely recognized as one of the most successful reforestation programs in the world, Korea remains highly dependent on imports to meet its raw material requirements. Total forest land is relatively stable at 6.5 million hectares. Current assessments place the total volume of standing timber at 234.0 million CUM. However, three-quarters of this timber is less than 30 years old. Annual roundwood production capacity is estimated at approximately 1.6 million CUM. The 1991 timber cut is forecast at 1.2 million CUM, up 7 percent from a year ago, but 34 percent below capacity because most trees are red pine and, thus, commercially unsuitable for downstream processing into lumber or plywood. Efforts by the Forestry Administration to increase utilization of domestic timber in value-added processing have been marginal because of poor tree quality, and the fact that less than 5 percent of pine stocks and less than 2 percent of the other major species are over 30 centimeters in diameter. Therefore, the bulk of the annual cut is usable mainly for pitprops and pulpwood. Korea's reforestation program has increased the total growing stock and improved erosion control, but has failed to expand supplies of commercially usable timber.

Strong growth in the Korean economy, coupled with the current domestic construction boom, is expected to boost 1991 output of lumber and panel products manufactured from imported logs. Record production levels are expected for softwood lumber, temperate and tropical hardwood lumber, hardboard and medium density fiberboard. Modest gains are forecast for tropical hardwood plywood and particleboard. Board products are Korea's growth sector for the 1990's. One major particleboard plant intends to expand its facilities by the end of 1992, and two additional plants are scheduled to open by the end of 1993. As a result, total processing capacity is expected to triple within the next two years. By the end of 1991, Korea reportedly will have four, fully operational medium density fiberboard plants with a combined annual production capacity of 339,000 CUM. Hardboard production more than doubled between 1989 and 1990. Output in 1991 is expected to increase 24 percent to 67,000 CUM.

TABLE	22.	KOREA	N FO	RESTR	Y PR	CODUCTION
	(:	1,000	Cubi	c Met	ers)	

	1989	1990	1991 1/
HARVEST	1,227	1,138	1,220
Softwood Lumber	2,978	3,481	3,800
Temperate Hardwood Lumber	39	47	55
Tropical Hardwood Lumber	1,219	1,350	1,400
Tropical Hardwood Plywood	1,180	1,199	1,200
Hardboard	25	54	67
Medium Density Fiberboard	85	113	170
Particleboard	164	165	170

^{1/} Preliminary.

TAIWAN: Timber production continues to decline due to the inaccessibility of remaining timber stands, rising logging costs, local labor shortages, conservation and environmental concerns, and cheaper imports of logs and wood products. Domestic timber supplied less than 3 percent of Taiwan's raw material requirements in 1990, and is expected to contribute even less in 1991. The 1991 timber cut is forecast at 100,000 CUM, down 12 percent from last year, and 73 percent below the Government's maximum allowable cut of 365,000 CUM. Production of hardwood lumber and panel products is expected to continue trending downward in 1991. However, production of softwood lumber is forecast to increase by 11 percent over 1990 due to increased local demand for construction materials and interior wood products.

TABLE 23. TAIWAN FORESTRY PRODUCTION (1,000 Cubic Meters)

	1989	<u>1990</u>	1991 1/
HARVEST	157	114	100
Softwood Lumber	56	36	40
Temperate Hardwood Lumber	676	574	500
Tropical Hardwood Lumber	227	170	160
Tropical/Temperate Hardwood Veneer	929	865	850
Tropical/Temperate Hardwood Plywood	583	469	400
Particleboard	110	105	90

^{1/} Preliminary.

MALAYSIA: In recent years, Malaysia has been accused of indiscriminate and excessive logging of its tropical rain forests. In response to this criticism, the Federal Government revised its domestic forest policy to include tighter controls on logging, improvements in forest management, better utilization of rubberwood supplies, and the establishment of additional commercial forest plantations.

Production prospects for the 1991 season appear favorable. Malaysia's tropical timber industry is expected to record gains in all major sectors. The 1991 timber harvest is forecast at 40.0 million CUM, up 3 percent from a year ago, but 2 percent below the record cut in 1989. Tropical hardwood log production is expected to rebound 2 percent, to 39.5 million CUM. Tighter restrictions on log exports, Government efforts to expand downstream processing, and greater demand from domestic and export markets, is expected to boost production of tropical hardwood lumber, plywood and veneer. Current forecasts for lumber and plywood indicate record production levels of 8.8 million CUM and 1.3 million CUM, respectively.

TABLE 24. MALAYSIAN FORESTRY PRODUCTION (1,000 Cubic Meters)

	<u>1989</u>	1990	1991 1/
HARVEST	40,812	39,066	40,000
Tropical Hardwood Logs	40,392	38,655	39,520
Tropical Hardwood Lumber	8,382	8,560	8,880
Tropical Hardwood Plywood	1,007	1,270	1,300
Tropical Hardwood Veneer	429	500	540
Poles/Piles/Posts/Pitprops	420	445	480
Particleboard	95	110	120

^{1/} Preliminary.

THE PHILIPPINES: Productivity within the Philippine forestry sector has been trending downward since 1988. The 1991 timber cut is forecast at a record low 2.3 million CUM, down 8 percent from last year, and just under the 1991 allowable cut of 2.385 million CUM set by the Department of Environment and Natural Resources (DENR).

Current assessments indicate that total forest cover in the Philippines is 4.2 million hectares. Virgin forest is estimated at only 800,000 hectares, down 100,000 hectares from 1989. Of the 3.4 million hectares of residual forest, about 1.9 million hectares of regrowth forest have had sufficient regeneration, or were logged lightly enough in the first cut, to be considered productive forest with a sustainable annual production volume of approximately 3.0 million CUM. The remaining 1.5 million hectares are largely non-productive.

On average, 120,000 hectares of forest are denuded every year. A reforestation target level is set annually by the DENR. The target level for 1990 was 150,000 hectares. Actual replantings totaled a record 191,663 hectares. Currently, there is some concern as to the viability of these plantings given the extended dryness experienced from late 1990 through May of 1991.

Beginning January 1, 1992, logging in virgin forests will be strictly prohibited. Approximately one-half of this area is located within concessions belonging to existing Timber License Agreement (TLA) holders. In an effort to better manage its forest resources, the DENR has been gradually reducing the number of TLA holders. As of May 1991, there were only 63 TLA holders, down from 142 in 1986. The DENR's original target was to reduce the total number of TLA holders to 30 by the end of 1991. However, this target has been revised upward to 50 to encompass those TLA holders who have evidenced a strong commitment to proper forest management.

To date, the Government has not resolved the major issue confronting the domestic forest industry—the proposed ban on commercial logging. Delays in enacting the necessary legislation stem from disagreement within the Congress as to whether the final bill should stipulate a "total" logging ban with harvesting restricted to tree plantations, or a "selective" ban with harvesting permitted in all areas identified as having more than 40 percent forest cover. Whichever type of logging ban is imposed, it appears probable that production levels will continue to decline. Preliminary forecasts indicate output of tropical hardwood logs, lumber, and veneer will drop to an all—time low in 1991. The absence of a definitive resolution to the proposed ban has brought investment in logging and wood processing to a standstill. In order to compete on world markets, Philippine sawmills and processing plants desperately need investment funds to upgrade equipment and improve product quality.

TABLE 25. THE PHILIPPINES FORESTRY PRODUCTION (1,000 Cubic Meters)

	1989	<u>1990</u>	1991 1/
HARVEST	3,217	2,500	2,300
Tropical Hardwood Logs	3,147	2,400	2,200
Tropical Hardwood Lumber	975	774	700
Tropical Hardwood Plywood	353	467	400
Tropical Hardwood Veneer	65	50	45

^{1/} Preliminary.

MYANMAR: The 1991 harvest is forecast at 31.3 million CUM, the bulk of which is fuelwood. Production of teak logs is forecast at 706,000 CUM, 17 percent above the Government's 1991 allowable cut of 603,000 CUM, but 5 percent less than the 1990 volume, due to declining reserves in the State's main producing areas of Pegu, Mandalay, and Sagaing. Fellings of teak logs from the Thai concession areas are expected to increase during 1991, but not enough to offset the smaller-than-anticipated harvest from the State's reserve forests. Overcutting of teak will probably continue as long as the Government's top priority is to maximize foreign exchange earnings.

Myanmar's timber reserves boast numerous other exotic tropical hardwoods, the most important of which are pyinkado, inn-kanyin, and padauk. Production of these non-teak hardwood logs is expected to exceed 3.6 million CUM in 1991, up 8 percent from last year. The Government set the 1991 allowable cut for non-teak hardwoods at 4.1 million CUM. Although fellings are expected to be 11 percent below target, they are rapidly approaching the sustainable limit. Production levels reportedly will continue to rise as Government policies increasingly mandate the substitution of exotic hardwoods for teak.

Sawnwood production for 1991 is forecast at 423,000 CUM, a 19 percent increase over 1990. Output of lumber, veneer and plywood processed from teak and other hardwoods is expected to rise in line with strong demand from domestic and overseas markets.

TABLE 26. MYANMAR FORESTRY PRODUCTION (1,000 Cubic Meters)

	<u>1989</u>	<u>1990</u>	<u>1991</u> <u>1</u> /
HARVEST	29,533	30,692	31,303
Teak Logs	729	747	706
Non-Teak Hardwood Logs	2,406	3,391	3,661
Teak Sawnwood	99	122	141
Non-Teak Hardwood Sawnwood	187	233	282

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FIELD TRIP REPORT ON SOVIET SPRING WHEAT SITUATION

A team led by the USDA traveled in the primary Soviet spring wheat regions of Kazakhstan and West Siberia during mid-August. The itinerary included the major spring wheat producing areas of the New Lands, including regions of the Kazakhstan Republic (Kustanay and Tselinograd oblasts) and West Siberia (Altay Kray). The objective of the team was to assess 1991 Soviet Spring Wheat production and to study grain production methodologies in the spring wheat areas. The team traveled under the auspices of the U.S.-U.S.S.R. Agreement on Cooperation in the Field of Agriculture.

Information obtained by crop observations and discussions with producers supported the USDA September estimate of 85.5 million tons for Soviet 1991 total wheat production. Soviet officials and farm managers reported that the area sown to grains this year is nearly identical to last year and is expected to stabilize after falling since the late 1970's. Crop conditions varied dramatically between and within areas visited, reflecting this season's severe drought and scattered rainfall. Spring wheat was in poor-fair condition in most areas with higher yields observed as the team traveled further north and east. West Siberia and Kazakhstan account for approximately 60 percent of the total Soviet spring wheat crop. Spring wheat accounts for roughly 30 percent of all Soviet wheat production.

The prospect of selling grain to the Government (procurement) was viewed with uncertainty by producers for the second year in a row. Procurements of grain by the State have been proceeding slowly, with sales, as of early September, reaching only 31 million tons with a 1991 procurement target of 77 million. The USDA team encountered little enthusiasm from State and collective farm managers relative to the hard-currency-for-grain program. Barter seems to be a way of life for many operations as a means to obtain desired products. Although many decrees have been announced by officials in Moscow, implementation has been difficult and life down on the Sovkhoz appears to go on as it has in the past.

Observations

- O Discussions with the Ministry of Agriculture in Moscow indicated that 1991 would be an average grain production year for the Soviet Union, with spring grains being reduced from 1990.
- o The total area sown to all grains this year was indicated to be nearly identical to last year and is expected to stabilize after falling since the late 1970's.
- o The Ministry reported that next year's (1992/93) winter crops area is expected to reach 40 million hectares, up from the 1991 level of 35 million.
- o Good agronomic principles were being applied everywhere observed; however, weeds were a problem in some locations due to the lack of herbicides.
- The spring wheat production regions visited did not report any significant shortage of fuel this year; however, they did report a shortage of quality plant protectants.

- o Standard wheat varieties, dating from the 1950's, are still dominant due to their drought tolerance. The team noted that newer varieties are only slowly being accepted by farm managers.
- o Research in Kazakhstan shows little advantage in employing fallow rotation over simple good management, such as deep plowing, snow retention, balanced fertilizer application, and the use of proper plant protectants.
- o Four basic methods for weed control were observed in the New Lands: narrow row spacings, deep tillage practices, tall varieties, and crop rotations.
- o The land privatization program is proceeding slowly in the areas visited.
- o USDA satellite imagery analysis and meteorological data were strongly supported by the team's ground truth assessment of spring wheat yields.

Moscow

- o Officials provided details concerning the reduced prospects for the 1991 spring wheat crop.
- This summer's drought in the New Lands was considered by many to be the worst in recent history. Many areas received little or no rain from May until mid-July.
- o The all-grain area for 1991 is nearly identical to last year.
- o The Ministry stated that the general trend in crop area across the New Lands is for more forage and less spring wheat area.
- o The shortage of quality plant protectants this year is primarily due to insufficient hard currency to pay for imports.

West Siberia

- o Spring wheat conditions looked the best here of all locations visited, with an estimated yield for the oblast reported at 1.2 tons per hectare.
- o The season was dry in the west and south, and wet in the east, with the city of Barnaul being the dividing point.
- o No shortage of fuel or fertilizers was reported in this region.
- O Direct combining is gaining popularity over the traditional 2-stage (swath/combine) method. Yield gains of up to 10 percent have been reported.
- o New seed often is often purchased only once every 3-5 years.

- o The low average annual precipitation precludes intensive fertilizer application and often inhibits fertilizer efficiency. Some wheat operations apply fertilizer only once every 2-4 years.
- o Fodder crop experimentation, with unexpectedly good results at this latitude, was evident. Early maturing corn and sorghum varieties from Krasnodar, Moldavia, Hungary, and Yugoslavia are being tested.
- o Lack of adequate on-farm storage facilities is a problem here as well as in most areas visited.

Kazakhstan

- A severe drought sharply reduced yield prospects for this year's spring wheat crop. Little or no rain reportedly fell from the May planting period through the reproductive period in mid-July.
- o Grain production in Kazakhstan reportedly will be down sharply from last year's bumper harvest of 28.5-million-tons (dry-weight basis) and will be one of the lowest in recent history.
- o Local officials indicated that there will be sufficient grain to meet Kazakhstan's internal requirements. Kazakhstan has prohibited the sale of grain outside its borders.
- o The decision of many farm managers to delay spring wheat sowing by 5-10 days and plant at a deeper depth generally is paying off in terms of higher yields and will allow some areas to harvest an average crop.
- o For spring wheat, narrow (6-inch) row spacing, extremely high seeding rates, and seeding with disc drills were observed as efforts to shade the ground and thus combat weeds.
- o Topsoil organic matter content may be expected to decline should current cultivation practices continue. These practices include disc drilling (requiring minimal surface residue), deep tillage, and the removal of crop residue for use as livestock feed.
- o In mid-August, spring wheat was about 10-14 days from harvest. The growth stage was milky ripe to soft dough.
- o Extremely variable crop conditions were observed. Yield estimates by team members and local officials for spring wheat ranged from 0.5 tons to 1.0 tons per hectare.
- o More grain is being held on-farm due to a lack of confidence in the economy, despite inadequate storage facilities.

- Snow retention practices during the winter are of great importance in northern Kazakhstan, where a reported 80 percent of the moisture needed during the wheat vegetative period is derived from snow-melt.
- o There was no reported shortage of fuel supplies.
- The lack of plant protectants was discussed. Weedy fields were observed.

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TABLE 27

Kazakhstan Total Grains: Area, Yield, and Production

Year	Area Harvested	Yield	Production
	(MILLION HECTARES)	(TONS PER HECTARE)	(MILLION TONS)
1980	25.3	1.09	27.5
1981	25.6	0.93	23.8
1982	25.4	0.77	19.5
1983	25.3	0.92	23.2
1984	25.4	0.62	15.7
1985	25.1	0.85	21.3
1986	24.6	1.15	28.3
1987	24.5	1.12	27.4
1988	24.3	0.93	22.6
1989	23.8	0.85	20.2
1990	23.4	1.33	31.2
Production figures are	e on a bunker-weight basis		

PRODUCTION ESTIMATES & CROP ASSESSMENT DIVISION, FAS, USDA

USSR: TOTAL GRAIN PRODUCTION AND PROCUREMENT BY REPUBLIC /1

1986 - 1990

(1,000 METRIC TONS)

L'S'LNH	% OF TOTAL	50.4	25.0	6.0	2.3	17.2	4.	0.7	0.5	0.2	0.7	0.1	0.1	0.5	1.9	1.3	0.4	0.1	0.1	100.0
-PROCIBEMENTS	AVG 86–90 T	34,393	17,079	286	1,600	11,738	952	450	347	156	497	92	65	341	1,302	862	275	65	100	68,237
	% OF TOTAL	53.5	23.4	1.2	3.7	12.2	2.9	. 6	6.0	0.5	1.0	0.3	0.1	9.0	2.0	0.8	0.8	0.2	0.2	100.0
	AVG 86–90	113,844	49,747	2,649	7,869	25,942	6,247	3,378	1,813	1,056	2,121	650	298	1,172	4,227	1,775	1,723	322	407	212,645
NOI	1990	127,000	53,200	2,600	8,200	31,200	6,800	3,600	2,000	1,200	2,400	200	300	1,400	4,400	2,000	1,600	300	200	235,800
-PRODUCTION	1989	112,360	54,900	3,538	7,900	20,200	6,324	3,537	1,715	1,072	1,607	532	214	828	4,071	1,607	1,714	322	428	210,900
 - - -	1988	102,807	47,388	3,052	6,922	22,560	5,050	3,046	1,413	591	2,504	714	373	1,417	4,775	2,200	1,758	382	435	195,058
	1987	109,084	50,184	2,011	9,281	27,444	6,897	3,554	2,086	1,257	2,057	664	274	1,119	4,443	1,822	1,909	359	353	211,401
	1986	117,968	43,063	2,044	7,041	28,306	6,164	3,155	1,850	1,159	2,035	638	331	1,066	3,447	1,248	1,633	246	320	210,068
	REPUBLIC	RSFSR	UKRAINE	MOLDAVIA	BELORUSSIA	KAZAKHSTAN	BALTICS:	ALLOANIA	ANA	ESTONIA	TRANS-CAUCASUS:	GEORGIA	ARMENIA	AZERBAIDZHAN	CENTRAL ASIA:	UZBEK	ARGIZ	TADZHIK	TURKMEN	TOTAL USSR

COTE D'IVOIRE GRAIN PRODUCTION

Total 1991/92 grain production in the Cote d'Ivoire is estimated at a record 1.36 million tons, up 5 percent or 60,000 tons from last year. The area devoted to d'Ivoire's food grains has increased more than 50 percent since the early 1980's. Total grain area reached a record 1.42 million hectares this year. Government initiatives to achieve self-sufficiency in domestic food grain production have led to area and production increases for rice, corn, millet, and sorghum. Ivorian rice production has increased nearly 75 percent since 1980. Corn production has increased more than 40 percent since 1980 with millet and sorghum output rising more than 60 percent in the same period. However, in spite of Government efforts, increases in grain production continue to be offset by the rising demands of a growing urban population.

RICE

The Cote d'Ivoire is expected to produce a record 0.73-million-ton (rough-basis) rice crop in 1991/92, due to an estimated record planted area and improved yields. Since 1980, the Government has implemented various programs aimed at boosting production by increasing planted area and providing technical assistance to farmers. In 1985, the Government undertook emergency actions to attain self-sufficiency in rice production. In spite of some initial success, high production costs and low-cost rice imports have tended to constrain continued output increases. In addition, financial problems faced by the Government have forced the suspension of free seed distribution to farmers. Instead, seed is sold to farmers at subsidized prices and fertilizer is provided free only to irrigated farms.

Area expansion and improved yield prospects for rice are expected to boost production during 1991/92; however, the decision to suspend the free supply of seed may moderate the increase. Many farmers planted this year's rice crop with seed left from prior harvests rather than purchasing quality seed. Another deterrent to further long-term production increases is harvest loss due to bird damage. Yield losses to birds reportedly average 20 percent each year.

Both upland and irrigated rice are produced in the Cote d'Ivoire, with upland rice accounting for 95 percent of the total area cultivated. Rice planting extends from April through July. Harvest begins in September and continues through December. Upland rice production is concentrated in areas where rainfall is adequate and well distributed, including the north and north-west savannah, the western forest zone, the Center-West, and the South. Irrigated rice is produced in areas of minimal or irregular rainfall, e.g., the Northeast and central Cote d'Ivoire at the transitional zone between savannah and forest.

Rice production has increased in recent years as a result of Government-sponsored technical direction, infrastructure improvements, and increased use of high yielding seed. Additional Government efforts include modernizing the production system, rehabilitating and equipping irrigated areas, and cultivating lowland areas and large plains. The emphasis of upland rice policy is on the establishment of optimal cultivation dates, regionalization of rice varieties, and reclamation of water logged lands. Irrigated rice policy focuses on the rehabilitation of existing hydroelectric projects, expansion of the area under technical supervision, and construction of additional dams.

CORN

Corn production for 1991/92 is estimated at 0.54 million tons, up from 0.49 million last year. Corn is produced throughout the Cote d'Ivoire, with the primary production areas in the northern half of the country. The main corn crop is planted from March to June and harvested from July through October. A secondary crop is planted in August and harvested in December. Ivorian soils are relatively fertile, allowing for the limited use of fertilizers, which are expensive and difficult to obtain. Cultivation is done predominantly by human labor, with some use of draft animals.

Production has increased steadily over the past decade as the Government has encouraged area expansion, increased area under technical supervision, established a favorable official producer price, and improved storage facilities. Several obstacles exist which limit corn production potential. Corn is produced for human consumption and as a feed grain. The demand for mixed feed has been low because of financial instability within the poultry industry, and locally produced corn often fails to meet the quality requirements established by mixed feed producers. Growth in the corn sector is also limited because of market restrictions. Corn export markets are few because neighboring countries, which were potential export markets, are now generally self-sufficient.

The goal of the Government corn policy is to improve productivity, marketing, and the promotion of industrial processing. The minimum producer price for corn has remained the same since July 1988. High storage costs and inadequate storage facilities has led small farmers to sell at a lower price during harvest to avoid quality deterioration. The Government has traditionally provided free seed to farmers, but, this practice was suspended this year. Seed is currently sold to farmers at subsidized prices.

MILLET AND SORGHUM

Millet production for the 1991/92 crop year is estimated at 59,000 tons, up 4 percent from last year due to an attractive market price, favorable early season rainfall, and area expansion. Sorghum production, which is estimated at 34,000 tons, up 6 percent from 1990/91, is also expected to rise based on increased area and favorable weather. Millet and sorghum are produced primarily in the savannah belt of northern Cote d'Ivoire. Planting is underway in May and continues until July. Harvest occurs between September and December. Producers utilize traditional management practices and receive little technical supervision. Both millet and sorghum have low priority in the Government's food production program and are produced as subsistence crops, although surplus grain is frequently marketed. Both are produced mainly for human consumption and are processed as a local food paste or traditional beer.

AGRICULTURAL PROFILE

Agriculture contributes roughly 30 percent of the Cote d'Ivoire's gross domestic product and provides employment for more than 50 percent of the population. Cote d'Ivoire is a major exporter of specialty crops such as cocoa, coffee, rubber, palm oil, and cotton. Cocoa and coffee production generate the majority of Cote d'Ivoire's export earnings, and the country's economy has been seriously affected by falling world market prices for these commodities. Cote d'Ivoire is self-sufficient in the production of most food crops such as cassava, millet, sorghum, and yams, although imported rice is needed to supplement local production. The area planted to rice has risen steadily during recent years. However, demands from a growing urban population have outpaced production increases, creating the need for continued imports.

The Ivorian government has traditionally been involved in virtually all facets of agriculture. Recently, however, serious economic problems have led the Government to liberalize the economy and to privatize some State-run agencies. The primary goals of current policy include: developing rural areas, modernizing agricultural activities, increasing food crop production (especially rice and corn), assuring favorable guaranteed producer prices, and promoting investment in agriculture.

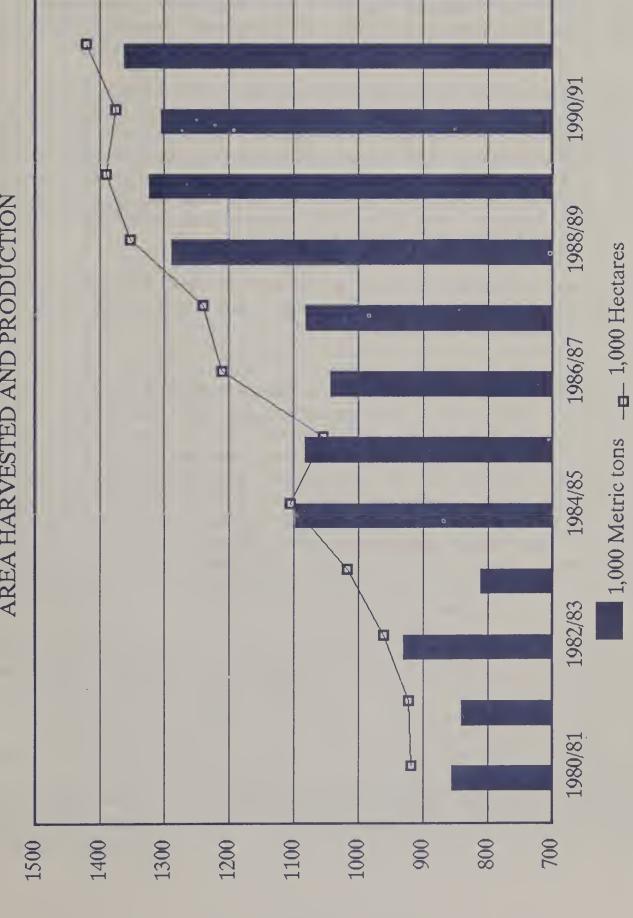
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Cote d'Ivoire Grains

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92f
AREA HARVESTED	ESTED				(1,000)	0 hectares)	(Se					
RICE (rough)	360	340	350	380	411	420	206	540	595	620	630	640
CORN	468	490	520	550	565	533	009	290	640	650	620	650
MILLET	54	58	56	54	63	99	99	72	74	75	80	83
SORGHUM	36	34	35	33	37	36	36	38	44	45	46	48
TOTAL GRAINS	918	922	961	1017	1106	1055	1211	1240	1353	1390	1376	1421
VIELD			Andrea and an anti-anti-anti-anti-anti-anti-anti-anti-		(metric ton		s per hectare)					
RICE (rough)	1.17	1.15	1.29	0.95	1.25	1.29	1.10	1.11	1.16	1.15	1.15	1.15
CORN	0.81	0.82	0.83	0.75	0.87	06.0	0.70	0.70	0.81	0.82	0.79	0.82
MILLET	0.63	0.55	0.54	0.48	0.65	0.61	0.61	0.63	0.65	0.68	0.71	0.71
SORGHUM	0.58	0.56	0.54	0.52	0.62	0.61	0.61	0.61	99.0	0.69	0.70	0.71
TOTAL GRAINS	0.93	0.91	0.97	0.80	0.99	1.03	0.86	0.87	0.95	0.95	0.95	96.0
PRODUCTION	N				(1,000	(1,000 metric tons)	(suc					
RICE (rough)	421	390	451	359	514	541	561	298	691	711	725	734
CORN	380	400	430	410	520	480	420	415	520	530	490	535
MILLET	34	32	30	26	41	40	40	45	48	51	57	59
SORGHUM	21	19	19	17	23	22	22	23	59	31	32	34
TOTAL GRAINS	856	841	930	812	1098	1083	1043	1081	1288	1323	1304	1362

CHART 1

COTE D'IVOIRE GRAINS AREA HARVESTED AND PRODUCTION



EAST EUROPEAN GRAIN PRODUCTION

Eastern Europe is projected to produce a total grain crop of 98.4 million tons for 1991, up 4.8 million or 5 percent from last year, but 5.3 million below the record 1984 harvest. Production trended upward throughout the 1970's and early 1980's, and peaked at a record 103.7 million tons in 1984. Over the past 7 years, production has fluctuated between 90.7 and 101.0 million tons. Harvested area, however, declined 3.1 million hectares since the early 1970's.

Eastern Europe, which is comprised of Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia, is expected to produce a wheat crop of 39.4 million tons in 1991, down 1.7 million or 4 percent from last year's record crop. Wheat is the largest grain crop produced in Eastern Europe making up roughly 40 percent of total grain production from 38 percent of total area planted to grains. Wheat area has generally fluctuated between 9 and 10 million hectares for the past 30 years while yields have steadily improved from a low of 1.62 tons per hectare in 1960 to a high of 4.32 in 1990. By comparison, the 1991 wheat yield in the European Community (EC) is estimated at 5.25 tons per hectare.

Coarse grain production in Eastern Europe for 1991 is estimated at 58.8 million tons, up 6.6 million or 13 percent from last year, but 6.5 million below the record 1984 harvest. Coarse grain area has trended downward since the early 1960's. Yields, however, have improved over the same period to a high of 3.83 tons per hectare in 1984 before slipping to an estimated 3.28 last year. Yields are expected to rebound because of improved weather in 1991, but remain well below peak levels. The EC's 1991 coarse grain average yield is estimated at 4.66 tons per hectare.

Rice production in Eastern Europe is relatively small and is estimated at 0.2 million tons (milled-basis) for 1991, down marginally from last year.

Albania

Total grain production in Albania is estimated at 0.9 million tons in 1991, marginally above last year. Area has changed little during the past 30 years, fluctuating between 0.3 and 0.4 million hectares. Grain crops cover almost 80 percent of the arable land, with wheat and corn being the most important crops. Wheat, which is produced in the central and northern regions, is estimated to total 0.5 million tons, unchanged from last year. Wheat area has remained in the 180,000 to 200,000 hectare range for the past ten years while yields have changed little over the same period. Corn production for 1991 is estimated at 0.4 million tons. Corn area has trended downward since the early 1960's; however, higher yields have more than made up for the decline in area and are expected to reach 4.0 tons per hectare this year.

Albania's soils and climate are most strongly influenced by the sharp topographic break between the western lowland strip and the surrounding mountains. Roughly 20 percent of the total land area is considered arable. The most fertile regions of the western lowlands are the provinces of Lushnja and Fieri, and the river valleys and basins of central and eastern Albania. The lowland area is characterized by a mild climate with winter temperatures generally above freezing. The cool, maritime summers are usually quite dry and most precipitation falls in the autumn and winter. These conditions are well suited to the production of winter grains. Irrigation in Albania is negligible.

Bulgaria

Total grain production in 1991 is estimated at 7.7 million tons, down marginally from last year and down 2.3 million from the record 1982 crop. Grain area has ranged from 2.5 to 1.8 million hectares since the early 1960's. Wheat production for 1991 is estimated at 4.3 million tons, down 0.8 million from last year and 1.1 million below the record 1989 crop. Harvested area has remained relatively constant for the past 10 years and has changed little since the early 1960's. Yields have demonstrated an upward trend since 1960 and have averaged 4.2 tons per hectare over the past 5 years. Wheat normally makes up more than half of the total grain area.

Coarse grain production is estimated at 3.3 million tons, up 0.6 million from last year, but down 1.7 million from the 1982 record of 5.0 million. Corn and barley are the major coarse grains produced, accounting for an estimated 1.9 and 1.3 million tons, respectively, in 1991. Corn output has been trending downward since the early 1980's due to reduced area and poorer yields. Barley production generally has been in the 1.0 to 1.7 million for range since 1970. Barley area and yields have shown large year-to-year fluctuations, but area is down from the mid-1970's while yields are up.

Bulgaria's climate is moderately continental but regionally variable. Frequent summer droughts, capable of causing severe yield fluctuations, have necessitated the extensive use of irrigation. Fertile soils and a varied climate, however, make the cultivation of a wide variety of crops possible. Wheat is grown nearly everywhere except in the extreme southwest, while corn is cultivated primarily in the northern third of the country.

Czechoslovakia

Total grain production in 1991 is estimated at 12.0 million tons, down approximately 0.4 million from last year's record. Harvested area has been declining slowly since the early 1970's. Yields have fluctuated but demonstrated a slight upward trend over the same period, resulting in a production level that generally has fluctuated between 10-12 million tons. Arable lands make up 40 percent of the total land area and grains cover slightly more than half of the cropped area.

Wheat and barley are Czechoslovakia's major grains and are produced primarily in the Elbe valley, the Moravian valleys, and the Slovakian lowlands. Wheat production for 1991 is estimated at 6.5 million tons, down 3 percent from last year's record. Wheat area has fluctuated relatively little for the past two decades while yields have improved steadily, finally leveling off at a 5.1 ton per hectare average over the past five years. Barley production is concentrated primarily in western Slovakia. Production for 1991 is estimated at 3.6 million tons, about 0.5 million below last year's record. Harvested area over the past three decades has fluctuated between 0.7 and 1.0 million hectares. During the past five years, barley area has returned to pre-1975 levels of between 0.7 and 0.8 million hectares. Yields have improved steadily since the early 1960's and have a 1986-90 average of 4.6 tons per hectare.

Hungary

Grain production for 1991 is estimated at 14.5 million tons, up 2.1 million from last year, but below the record of 15.5 million in 1984. Wheat and corn are the main grain crops in Hungary and together occupy roughly 82 percent of the estimated grain area.

Corn is Hungary's major crop with production for 1991 estimated at 6.7 million tons, up sharply from last year's drought-reduced harvest of 4.5 million. Corn yields improved steadily until the early 1980's, then leveled off and have fluctuated within the 5.5 to 6.7 tons per hectare range throughout the past decade. Harvested area has declined slightly from the level of the mid-1970's.

Wheat production for 1991 is estimated at 5.9 million tons from an area of 1.2 million hectares. While wheat area is estimated up 3 percent, production is down 4 percent from last year, and 20 percent below the record 1984 harvest. The condition of winter wheat and rye this year was better than the average of previous 5 years. Damage to winter grains this year was less than expected, despite extremely low temperatures in February. Freezing of standing water usually is the main cause of winterkill in Hungary and relatively low soil moisture during the first half of the winter resulted in less damage than normal. Rye production in Hungary is small at 0.2 million tons for 1991.

Barley production for 1991 is estimated at a record 1.6 million tons, up 0.3 million from last year. Some of the recently introduced, high-yielding winter barley varieties apparently are not as tolerant to freeze damage as the older varieties. Spring barley, on the other hand, has benefited from favorable weather, resulting in estimated total barley yields this year of 4.56 tons per hectare, second only to the record 4.68 produced in 1989.

Poland

Polish total grain output for 1991 is estimated at 27.4 million tons, down 0.6 million or 2 percent from last year's record crop. Area planted to grains has fluctuated only slightly during the past 15 years. Grain yields, which have a 10-year average of 3.0 tons per hectare, have shown some improvement in the past three years.

Wheat is the leading grain crop in Poland, surpassing rye in 1986. Wheat production for 1991 is estimated at 9.0 million tons, virtually unchanged from last year's record. Total coarse grain production is estimated at 18.4 million tons, down 0.6 million from last year's record. Rye production for 1991 is expected to reach 8.5 million tons, down 4 percent from 1990. Barley production for 1991 is projected at 4.2 million tons, unchanged from last year, but only 0.2 million tons below the record set in 1986.

Small grains — wheat, rye, and barley — are well suited to Poland's cool, moist climate and short summer growing season. Most grains are grown in a broad east—west zone in central Poland, which represents about 40 percent of all cultivated land. Wheat area is estimated to account for 28 percent of total 1991 grain area, and rye 35 percent. Wheat is more commonly grown in the south and production has risen at the expense of rye and oats. Oats tend to predominate on the soils of the northern lake region, and barley is concentrated in the central and southeastern areas. Virtually all barley grown in Poland is spring—planted, versus only a quarter of the wheat being spring grown.

Polish soils require fertilizers to achieve satisfactory yields. About 50 percent of Polish soils have a low phosphorous and potash content. Over 70 percent of the soils are light, and about 60 percent require regular liming. Basic crop production inputs are quite expensive. Falling grain prices caused fertilizer purchases for the 1991 crop to decline significantly last autumn. Purchases of plant protection chemicals also have been reduced from the 1989 level due to high prices. Reduced use of fertilizers and plant protection agents will likely contribute to lower yields for the 1991 crop.

Romania

Total grain production in Romania for 1991 is estimated at 18.9 million tons, up 1.0 million from last year, but down substantially from the record 1984 crop of 23.6 million. Grain harvested area has fluctuated between 5.6 and 6.5 million hectares during the last two decades.

Corn is the major grain produced in Romania followed, by wheat and barley. Corn production for 1991 is estimated at 8.5 million tons, up 1.0 million from last year, but down sharply from the record 13.3 million set in 1984. Corn yields improved steadily throughout the 1960's and 1970's, reaching a record 4.57 tons per hectare in 1982. Since then, corn yields trended downward and have averaged 3.4 tons per hectare over the past 5 years.

Wheat production is estimated at 7.0 million tons for 1991, down 0.3 million from last year and 1.4 million below the record set in 1988. Wheat yields have declined slightly from the record 3.5 tons per hectare produced in 1988. Wheat is produced throughout Romania, with the southern, eastern, and extreme western plains having the best agronomic conditions. Mostly soft and semi-hard winter wheat varieties are produced, with some hard wheat produced on the eastern plains. Barley production is projected at 3.0 million tons, up 0.3 million from last year because of higher area and yields. Barley yields trended upward over the past three decades, reaching a record 4.43 tons per hectare in 1989. Yields for 1991 are down from this high but above the 1986-1990 average. Poor crop management practices and the lack of timely input applications have negatively affected yields for all grains in recent years.

Romania's agricultural sector has been undergoing significant changes over the past few years. Land reform has been a major topic throughout 1990 and was finally adopted in March 1991. Originally, land was to be re-distributed in early May; however, a decision was made to delay the action until this fall. Many households have proceeded, nevertheless, to cultivate their own small plots, which may result in labor shortages on the collective farms later in the year. The most significant occurrence in 1990 was the liberalization of farmers' markets and the abolition of forced State marketing. State institutions this year have provided little assistance to the newly created "free markets", leading to excessive supplies in local areas, but unsatisfied distant demand.

Yugoslavia

Yugoslav total grain output for 1991 is estimated at 17.0 million tons, up 3.0 million from last year, but down 8 percent from the record 1986 crop. Harvested area has shown a downward trend since the early 1960's; however, higher yields generally have offset the lower area. Corn and wheat are the dominant grains produced, followed by barley and small amounts of rye, oats, sorghum, and rice.

Corn production for 1991 is estimated at 9.7 million tons, up sharply from last year's 6.6 million. Corn area has changed little over the last two decades while yields improved throughout this period until their peak with the record 5.3 tons per hectare in 1986. Yields have since declined to roughly 4.2 tons per hectare except for 1988 and 1990, both drought years.

Wheat area has shown a downward trend since the late 1960's, but yield gains have more than offset the area losses. Production this year is estimated at 6.2 million tons, down 2 percent from last year's record. Reduced soil moisture last fall prevented farmers from completely sowing their wheat during the optimal period (October 1-25) and in the southern area, most of the crop was planted after the optimal period. Abnormally warm weather and frequent rainfall during December and January enabled the crop to enter winter in good condition. Generally favorable weather throughout the spring and summer months promoted this year's near record output.

Grain production in Yugoslavia is primarily concentrated in the Pannonian Plains in the northeast, including parts of Croatia and Vojvodina. This region has a continental climate with variable rainfall patterns and contains the country's most fertile soils.

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EAST EUROPEAN GRAIN PRODUCTION

EAST EUROPEAN GRAIN AREA

				(1000 HE	CTARES)					
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 SEP
Albania										
Wheat	195	189	190	190	190	190	180	180	180	180
Barley	12	13	13	13	13	13	13	13	13	13
Corn	92	87	90	90	90	90	95	95	100	100
Rye	10	11	11	11	11	11	12	12	12	12
Coarse Grains	134	131	134	134	134	134	140	140	145	145
Total Grains	329	320	324	324	324	324	320	320	325	325
Bulgaria					02 1	024	020	020	020	323
Wheat	1059	1128	1126	1067	1107	1005	1100	1400	4.400	4400
Barley	352	323			1127	1085	1182	1138	1163	1100
Corn	621		315	260	318	295	345	360	360	360
	23	596	542	435	573	497	490	563	400	475
Rye Crains		25	26	32	30	30	30	30	30	30
Coarse Grains	1040	979	907	757	950	851	893	980	817	892
Total Grains	2115	2123	2049	1837	2093	1952	2091	2134	1996	2008
Czechoslovak										
Wheat	1073	1192	1209	1221	1213	1217	1250	1241	1241	1250
Barley	967	822	790	799	821	840	820	752	743	750
Corn	183	204	235	224	217	220	215	204	140	220
Rye	176	203	197	182	156	142	155	175	171	170
Coarse Grains	1498	1383	1362	1331	1303	1322	1305	1233	1145	1240
Total Grains	2571	2575	2571	2552	2516	2539	2555	2474	2386	2490
Hungary										2,00
Wheat	1310	1355	1361	1358	1318	1301	1281	1242	1101	1150
Barley	262	277	270	279	253	205	264	283	1121 297	1150
Corn	1130	1102	1107	1053	1118	1144	1103	1084	1070	340
Rye	74	72	75	85	89	94	97	97	92	1119
Coarse Grains	1516	1499	1496	1461	1501	1483	1506			93
Total Grains	2839	2867	2870	2834	2834	2799	2799	1506 2760	1507	1594
Poland	2000	200.	2010	2001	2004	2133	2133	2700	2640	2756
Wheat	1456	1537	1707	1005	0005	0400	0470	0.40		
Barley	1236	1099	1707	1885	2025	2132	2179	2195	2281	2375
Corn	16		1054	1242	1335	1286	1250	1175	1174	1255
Rye	3273	17	15	16	22	32	40	51	45	50
Coarse Grains	6638	3448	3545	3083	2760	2647	2874	2924	3063	3000
Total Grains	8094	6571	6452	6319	6213	5940	6259	6181	6236	6255
	0094	8108	8159	8204	8238	8072	8438	8376	8517	8630
Romania										
Wheat	2151	2232	2360	2355	2530	2400	2400	2350	2250	2200
Barley	943	741	672	680	575	560	750	768	750	800
Corn	2764	2935	3091	3090	3000	2900	2900	2800	2500	2350
Rye	40	42	35	40	40	42	40	40	35	35
Coarse Grains	3850	3804	3881	3891	3695	3582	3777	3725	3439	3343
Total Grains	6022	6064	6274	6284	6270	6029	6225	6124	5729	5581
Yugoslavia										
Wheat	1558	1609	1458	1348	1346	1455	1506	1479	1495	1533
Barley	284	280	271	264	267	213	222	242	245	250
Corn	2246	2264	2331	2400	2369	2218	2269	2268		
Rye	53	51	47	44	42	41	40	37	2213	2300
Coarse Grains	2762	2766	2805	2862	2834	2614	2668		38	38
Total Grains	4329	4384	4272	4219	4189	4079	4183	2693	2637	2730
East Europe			12.2	1210	4100	4073	4100	4178	4141	4269
Wheat	9900	0040	0444	0404	07.00	070				
Barley	8802	9242	9411	9424	9749	9780	9978	9825	9731	9788
Corn	4056	3555	3385	3537	3582	3412	3664	3593	3582	3768
Rye	7052	7205	7411	7308	7389	7101	7112	7065	6468	6614
	3649	3852	3936	3477	3128	3007	3248	3315	3441	3378
Coarse Grains Total Grains	17438	17133	17037	16755	16630	15926	16548	16458	15926	16199
Total Glall'S	26299	26441	26519	26254	26464	25794	26611	26366	25734	26059

TABLE 32

EAST EUROPEAN GRAIN YIELDS

(TONS PER HECTARE

			(10	ONS PER HE	CTARE)					
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 SEP
Albania										
Wheat	2.69	3.08	3.16	3.03	2.95	2.95	3.00	3.00	2.50	2.50
Barley	2.08	2.31	2.31	2.31	2.31	2.31	2.69	2.69	2.69	2.69
Corn	3.72	4.21	4.00	4.00	4.00	4.00	4.21	4.21	3.80	4.00
Rye	0.80	0.91	1.09	1.09	1.00	1.00	0.83	0.83	1.00	1.00
Coarse Grains	3.02	3.33	3.22	3.22	3.22	3.22	3.39	3.39	3.15	
Total Grains	2.82	3.18	3.19	3.11	3.06	3.06	3.17			3.29
	2.02	3.10	3.13	3.11	3.00	3.00	3.17	3.17	2.79	2.85
Bulgaria										
Wheat	4.64	3.19	4.29	2.88	3.84	3.82	4.01	4.75	4.38	3.91
Barley	4.08	3.24	4.06	3.08	3.60	3.70	3.81	4.36	3.74	3.74
Corn	5.50	5.23	5.52	3.10	4.97	3.74	3.18	4.30	3.10	3.89
Rye	1.48	1.24	1.42	1.53	1.67	1.50	1.67	1.50	1.50	1.50
Coarse Grains	4.75	4.31	4.78	2.96	4.30	3.57	3.33	4.16	3.28	3.68
Total Grains	4.69	3.72	4.51	2.92	4.06	3.72	3.73	4.48	3.93	3.81
Czechoslovakia									0.00	0.0.
	4.20	4.88	E 10	4.02	4 27	E 06	E 24	E 10	E 44	F 00
Wheat	4.29		5.10	4.93	4.37	5.06	5.24	5.12	5.41	5.20
Barley	3.78	3.99	4.65	4.43	4.30	4.23	4.15	4.72	5.45	4.73
Corn	5.14	3.54	4.00	4.97	4.57	5.27	4.42	4.90	3.63	4.00
Rye	3.31	3.70	3.60	3.41	3.51	3.49	3.42	4.05	4.26	3.82
Coarse Grains	3.78	3.78	4.27	4.28	4.20	4.24	4.02	4.53	4.98	4.42
Total Grains	4.00	4.29	4.66	4.59	4.29	4.63	4.61	4.83	5.20	4.81
Hungary										
Wheat	4.39	4.40	5.41	4.84	4.40	4.42	5.44	5.24	5.49	5.13
Barley	3.30	3.64	4.47	3.75	3.39	3.87	4.43	4.68	4.38	4.56
Corn	6.86	5.68	5.88	6.47	6.49	6.32	5.47	6.22	4.23	5.94
Rye	1.55	1.89	2.56	1.95	1.93	1.98	2.53	2.06	2.46	2.40
Coarse Grains	5.84	5.02	5.39	5.59	5.61	5.61	5.03	5.58	4.12	5.37
Total Grains	5.16	4.72	5.39	5.22	5.03	5.04	5.22	5.41	4.70	5.26
Poland										
Wheat	3.07	3.36	3.52	3.43	3.70	3.73	3.48	3.86	3.96	3.79
Barley	2.95	2.97	3.37	3.29	3.30	3.37	3.04	3.33	3.59	3.36
Corn	4.25	3.76	3.80	4.31	5.14	4.56	5.10	4.78	6.44	5.00
Rye	2.38	2.55	2.69	2.47	2.56	2.57	2.52	2.95	2.86	2.82
Coarse Grains	2.51	2.58	2.85	2.73	2.82	2.88	2.70	2.99	3.04	2.94
Total Grains	2.62	2.73	2.99	2.89	3.04	3.10	2.90	3.22	3.29	3.18
Romania										
	2.04	0.24	2.04	0.44	0.05	0.50	2.50	2 20	2.04	2 10
Wheat	3.01	2.34	3.21	2.41	2.65	2.50	3.50	3.32	3.24	3.18
Barley	3.24	2.96	3.64	2.72	3.39	3.21	4.00	4.43	3.60	3.75
Corn	4.57	4.08	4.29	3.40	4.00	3.62	3.45	3.21	3.00	3.62
Rye	1.00	0.95	1.43	1.25	1.50	1.19	1.50	1.95	1.94	2.00
Coarse Grains	4.11	3.76	4.09	3.22	3.84	3.48	3.51	3.40	3.06	3.54
Total Grains	3.71	3.24	3.76	2.91	3.36	3.09	3.50	3.35	3.12	3.38
Yugoslavia										
Wheat	3.35	3.43	3.84	3.59	3.55	3.62	4.18	3.79	4.25	4.06
Barley	2.36	2.36	2.76	2.67	2.63	2.37	2.77	2.90	2.82	2.80
						4.00	3.39	4.15	2.99	4.22
Corn	4.95	4.73	4.84	4.12	5.29				1.89	1.97
Rye	1.58	1.63	1.72	1.75	1.76	1.68	1.90	2.03		
Coarse Grains	4.40	4.24	4.41	3.82	4.79	3.70	3.24	3.89	2.91	3.94
Total Grains	4.02	3.94	4.22	3.75	4.39	3.68	3.58	3.85	3.40	3.98
East Europe										
Wheat	3.63	3.45	4.05	3.52	3.59	3.66	4.12	4.14	4.22	4.02
Barley	3.29	3.23	3.82	3.41	3.52	3.55	3.64	4.03	4.00	3.82
Corn	5.14	4.61	4.78	4.12	4.89	4.24	3.77	4.14	3.26	4.27
Rye	2.37	2.55	2.70	2.47	2.55	2.55	2.53	2.94	2.88	2.82
Coarse Grains	3.70	3.52	3.83	3.42	3.83	3.56	3.33	3.66	3.28	3.63
	3.68	3.50	3.91	3.46	3.74	3.60	3.63	3.83	3.63	3.77
Total Grains	3.00	3.30	3.51	0.40	3.74	3.00	0.00	0.00	0.00	0.77

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